

---

**title:** Prayers in Stone : Greek Architectural Sculpture Ca. 600-100  
B.C.E. Sather Classical Lectures ; V. 63

**author:** Ridgway, Brunilde Sismondo.

**publisher:** University of California Press  
**isbn10 | asin:** 0520215567  
**print isbn13:** 9780520215566  
**ebook isbn13:** 9780585321585  
**language:** English  
**subject** Sculpture, Greek--Themes,  
motives, Sculpture, Hellenistic--  
Themes, motives, Relief (Sculpture),  
Greek--Themes, motives,  
Relief (Sculpture), Hellenistic--  
Themes, motives, Decoration  
and ornament, Architectural--  
Greece--Themes, motives.  
**publication date:** 1999  
**lcc:** NA3350.R53 1999eb  
**ddc:** 733/.3  
**subject** Sculpture, Greek--Themes,  
motives, Sculpture, Hellenistic--  
Themes, motives, Relief (Sculpture),  
Greek--Themes, motives,  
Relief (Sculpture), Hellenistic--  
Themes, motives, Decoration  
and ornament, Architectural--  
Greece--Themes, motives.

# Prayers in Stone



Sather Classical Lectures  
Volume Sixty-Three

# Prayers in Stone

## Greek Architectural Sculpture

### Ca. 600-100 B.C.E.

Brunilde Sismondo Ridgway

The Sather Classical Lectures 1996

UNIVERSITY OF CALIFORNIA PRESS  
Berkeley · Los Angeles · London

University of California Press  
Berkeley and Los Angeles, California  
University of California Press, Ltd.  
London, England

© 1999 by The Regents of the University of California

Library of Congress Cataloging-in-Publication Data

Ridgway, Brunilde Sismondo, 1929

Prayers in stone : Greek architectural sculpture ca.  
B.C.E. / by Brunilde Sismondo Ridgway.

p. cm.(Sather classical lectures : v. 63)

Includes bibliographical references and index.

ISBN 0-520-21556-7 (alk. paper)

1. Sculpture, Greek Themes, motives. 2. Sculpture,  
Themes, motives. 3. Relief (Sculpture), Greek Ther

4. Relief (Sculpture), Hellentistic Themes, motives.  
and ornament, Architectural Greece Themes, motive

II. Series.

NA3350.R53 1999

733'.3dc21

Manufactured in the United States of America

9 8 7 6 5 4 3 2 1

The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences—Permanence of Paper for Printed Library Materials ANSI Z39.48-1984.

# Contents

Preface

Glossary

1. Why: The Advantages and Limitations of Studyin
2. What: The Issue of Definition
3. Where: The Issue of Visibility
4. How: The Role of Color
5. When: The Changing Meaning
6. Who: Architect, Sculptor, Patron

Conclusions

List of Maps and Illustrations

List of Figures

List of Color Plates

Bibliography

Index of Places

# Preface

When, in March 1993, I accepted the honor of delivering the Sather Lectures in 1996 and selected as a topic a discussion of Greek architectural sculpture, I was unaware that the Berkeley Campus offered such a variety of examples of plastic embellishment on its buildings from moldings to various types of capitals, from wall reliefs to akroteria and finials. It was therefore my great pleasure to begin each one of my talks with a Berkeley structure, which allowed me to make a specific point in keeping with the topic for that evening. I regret that I cannot include all such references in the written version of my presentation, which is meant for a wider readership, many of whom would be as I was unfamiliar with the Berkeley environment. I want, however, to acknowledge what a great source of inspiration my stay at the University has been, and what a delight I have derived from its magnificent grounds and varied buildings. (And, yes, the weather was beautiful almost all the time!)

A person who pointed me in the direction of pertinent examples and was of great help in producing slides that illustrated them is Kathryn Bothos, head curator of the visual resources collection for the Art History Department at Berkeley. She and her staff Jan Eklund, Gloria Garaventa, Laura Gobbi, and the photographer Julie Wolf were invaluable in their unstinting assistance. The success of my verbal presentations was almost totally dependent on their good offices, since I use images as mnemonic devices and can only "speak to the slides" as I show them.



My Berkeley colleagues in the Classics and Art History Departments were equally generous in supplying me with their own slides, helping me with the mechanics of the illustrated presentations, or making scholarly suggestions related to my topics. Here I must single out Crawford Greenewalt, Stephen Miller, and especially Andrew Stewart, who not only attended my Wednesday lectures but also came to all my Monday seminars, providing stimulating discussion and helpful references. Specific comments have been acknowledged in my notes, but here I want to thank also William Anderson, Michael Clark, Erich Gruen, Robert Knapp, Leslie Kurke, Anthony Long, Kathleen McCarthy, Donald Mastronarde, and Charles Murgia, who made me feel so welcome and made my stay in Berkeley both profitable and very enjoyable. Mark Griffith, the current Chair of the Classics Department, deserves a special mention for his constant help in all facets of my appointment and for his

humorous and generous introductions at each Sather talk. My "Sather Assistants" were Kate Gilhuly, Patricia Slatin, Sarah Stroup and Alan Zeitlin. They took turns in coming to each lecture and providing the necessary keys that unlocked the magic of projection technology, often under less than favorable conditions.

I wrote most of my text at Bryn Mawr College, so that the various chapters could be made immediately available to the Berkeley students who joined my Graduate Seminar on Greek Architectural Sculpture at the end of August 1996. Their criticism and comments have been incorporated whenever possible, and I want to acknowledge here the stimulating effect of their own presentations. I therefore extend my thanks to Elizabeth Baughan, Jorge Bravo, Angela Buxton, Kim Codella, Celina Gray, Jeannette Marchand, Kristen Seaman, and Christopher Ulbrich; faithful listeners and commentators were also Frank Cope, Barbara Mendoza, and especially Isabel Pafford. I am afraid their input has resulted in a much more extended text than that which I produced for them at the beginning of the semester, but their loss is certainly my gain, for which I am grateful.

While writing at Bryn Mawr, I had the usual, invaluable help of Eileen Markson, Head of the Art and Archaeology Library, and her coworkers, especially Marshall Johnston; their assistance continued even during my Berkeley stay, when they supplied faxes and photocopies at short notice for materials locally unavailable. On the conceptual level, I am especially indebted to G. Roger Edwards, whose retirement has increased his generous disposition toward the Bryn Mawr students, to the extent that he now reads everything I write and gives me

the benefit of his vast knowledge, his accumulated bibliography, his critique and careful questioning of obscure sentences (and spellings), as well as his cheering encouragement. Another person who read my entire manuscript before I left Bryn Mawr is Pamela A. Webb, whose specific expertise on Hellenistic architectural sculpture provided much help and saved me from some errors. Her beautiful book (quite different from her Dissertation) reached me only toward the end of my Berkeley stay, but I have tried to incorporate references to it whenever possible. It is rewarding to see that we often arrive at similar conclusions independently of each other. Finally, Alice A. Donohue read an early version of my chapter 5, which was much improved by her critical acumen and iconographic understanding.

After the pleasure of acknowledging all those who, directly or indirectly, have contributed to this book, comes the harder task of trying to explain its guiding principles. As already stated, I gave each lecture with the help of a full complement of slides (approximately seventy-five per talk) yet I mentioned far fewer monuments and examples than those included in my written chapters, where I have the advantage of using extensive notes. These chapters are meant for close reading, not for oral presentation, and therefore those members of my audience who now read the book may find it quite different, in its ordering and presentation, from what they heard. Yet this expanded coverage exacerbates the already-existing problem of illustrating my words. To provide a photograph for each item mentioned would be very difficult and prohibitively expensive; to limit my visual commentary to the few monuments for which photographs are readily available would mean to focus on those

that are already well known and amply illustrated elsewhere. Moldings, capitals, and other architectural elements, moreover, are often not particularly photogenic. It seemed therefore best to me to provide line drawings to show the architectural articulations of the standard Greek orders, reconstructions of a few monuments most frequently mentioned, and maps clarifying the location of each site of relevance for my text. Some photographs of details are meant to elucidate specific points. A few color plates especially for the Lefkadia Great Tomb should give the reader an idea of the vivid tones that once embellished a Greek structure. I have, however, taken care to provide easy reference to an illustration of every item cited, so that students with access to an academic library can check whatever they cannot mentally recall.

As usual, I write for students asking questions rather than provid-

ing answers; making suggestions of my own but only after expressing others' theories; always documenting my statements, perhaps excessively, so that my readings can be checked and my sources consulted directly. I hope students will take advantage of the bibliographical leads provided by my text. On the other hand, even in the happy world of the computer and the Internet, it is impossible to keep one's information consistently up to date, and I fear important articles of recent publication may have escaped me. The topic of architectural sculpture is constantly evolving, and each new excavation season brings to light unexpected and important material for consideration. It will be up to the younger generation to update my work.

In my writings, I try to use the original Greek spelling of architectural terms and sites whenever possible, but consistency is unattainable, given the familiarity of names like Athens and metopes/triglyphs. Clarity has been my dominant criterion. Classical with a capitalized initial refers to the Greek phase between the Archaic and the Hellenistic; a lower-case initial refers instead to Greek and Roman art and culture as we know them. I use the Karian spelling "Maussolleion" when mentioning the original tomb of Maussollos at Halikarnassos, but the traditional spelling "Mausoleum" when citing imitative funerary structures built elsewhere for later occupants. All dates should be considered B.C.E. unless otherwise specified.

My text was officially handed over to the Sather Committee on November 6, 1996; reviewers' suggestions (gratefully received) and bibliographical additions were incorporated up to September 16, 1997. I wish to thank warmly Mary Lamprecht, editor at the University of California Press, for her constant help and patience with a complex manuscript and an impatient author, and Elizabeth Ditmars for her painstaking and intelligent copyediting.

BRUNILDE SISMONDO  
RIDGWAY

## Glossary of Architectural Terms (Supplementing the Diagrams of the Orders) and of Terms of Classical Derivation

N.B.: Architectural terms are often used in their anglicized (Latinized) form (e.g., echinus, acroterium), whereas here the Greek transliteration, where applicable, has been used throughout (e.g., echinos, akroterion)

### A

**ADYTON**the innermost room of a temple, usually accessible only from the cella

**AGORA**a Greek term for market-place and public area (usually referring to the Athenian site when capitalized)

**AIGIS** the protective hide (of a goat?) worn by Athena, who received it from her father Zeus. It is often adorned with a central gorgoneion, fringed with snakes and usually rendered with a scaly or feather pattern

**AITION** a Greek word for cause, occasion, motivation, often used to explain the origin of a ritual or myth

**AKANTHOS** a spiky, lustrous, deep-green bush typical of Mediterranean lands; in stone, used as finial for gravestones and imitated in Corinthian capitals

**AKROPOLIS** "high city" or fortified citadel, often including a prehistoric palace or a later sanctuary (when capitalized, referring specifically to the Athenian citadel)

**AKROTERION** (PL., AKROTERIA; ADJ., AKROTERIAL): sculpture at the peak ("central") or the two ends ("lateral") of a gabled roof



AMAZONOMACHY(legendary) battle between Greeks and Amazons

AMPHIPROSTYLEterm indicating a building with columns in front of both short sides (i.e., having front and back prostyle porches)

ANDRONthe main reception room of a house or palace, primarily meant for men, who entertained reclining on couches

ANNULET(S)projecting rings at the bottom of a Doric echinos

ANTA (PL., ANTAE)the Latin term for the thickened (pier-like) end of a lateral wall that usually serves as respond to a column. When the columns of a building are placed between antae, the structure is said to be "in antis." See also pro-style

**ANTEFIX** (PL., ANTEFIXES)a plaque or disk serving to close the opening of the cover tile over the joins between the flat tiles along the eaves of a sloping roof; rampant: an antefix used together with a sima, over which it "climbs," so as to be visible atop the gutter. Antefixes can also be used on the crest of the roof

**ANTHEMION** (PL., ANTHEMIA)a floral ornament, whether used singly, as an akroterial form, or in a chain; in the latter case, it is usually composed of alternating lotus and palmette patterns

**ARCHITRAVE**another term for epistyle

**ARETE**a Greek word to indicate valor but also virtue, excellence

**ASTRAGAL**a small molding of rounded, convex section, usually carved with a bead-and-reel pattern

**ATLAS** (PL., ATLANTES) another term for Telamon

**AULETES** Greek term for double pipe player

**B**

**BALTEUS** the belt-like ornament centered on and compressing the baluster side of an Ionic capital, comparable to a ribbon tying a scroll

**BALUSTER SIDE** the lateral aspect of an Ionic capital; the side usually at right angle to the volute face that looks like a scroll

**BOUKRANION** (PL., BOUKRANIA) the head or the skull of a bull in frontal view, used as a single motif, usually connoting a sacrificial animal

**C**

**CANALIS**the area connecting the volutes of an Ionic capital, above the echinos; also used to indicate the space between the fillets of an Ionic volute

**CELLA**the enclosed chamber (main room) of a temple

**CHORAGIC**connected with a theatrical chorus, and therefore, in general, with theatrical performances

**CHRYSELEPHANTINE**made of gold and ivory

**COFFER**recessed panel in a vault, ceiling, or soffit

***COLUMNÆ CAELATAE***Latin term referring to sculptured column drums, as at Ephesos

**CORNICE**another term for geison

**CORONA**the vertical face of the cornice

## D

DADO the lower part of a wall surface when forming a sort of podium along its length

DEME (PL., DEMES) a country district, especially in Attika

DENTIL(S) tooth-like, rectangular projections forming a course below the Ionic cornice; in Ionic territory used at first in place of the continuous frieze, but eventually also in conjunction with it

DIPTERAL having two rows of columns all around

DISTYLE having two columns

E

ENGAGED COLUMN a column partly built into the fabric of a wall, so that only half of it or slightly more protrudes from the surface

ENTABLATURE all the architectural elements crowning a building, from above the columns (or a wall) to the level of the roof (usually comprising architrave, frieze course, cornice, sima, and, on façade, pediment)

ENTASIS the slight swelling of a column shaft that suggests the tensing of a biceps muscle; the difference from the true vertical of the edge of a drum, which however never counteracts its taper

EPIKRANITIS molding(s) crowning a (usually plain) wall

**EPINIKION** a victory song/poem

**F**

**FASCIA** (PL., FASCIAE) a flat projecting band; three fasciae (more rarely two) articulate horizontally the epistyle of an Ionic entablature

**FLEURON** the flower ornament centered toward the top of each side on a Corinthian capital, either above the tendrils and akanthos leaves of the lower section and between the corner spirals, or on the abacus

**FLUTES/FLUTING** the vertical concave striations scoring the shaft of a Greek column

**G**

**GABLE** another term for pediment; see also tympanum

**GALATOMACHY**battle against the Gauls (Galatians), usually by the Pergamenes; also occasionally called Keltomachy (the Gauls were Kelts)

**GEISON** (PL., GEISA)another term for cornice

**GIGANTOMACHY**the mythical battle between the Olympian gods and the Giants, children of the Earth (Ge)

**GORGONEION** (PL., GORGONEIA)the severed head of the Gorgon Medousa

**GUILLOCHE**a braid pattern, comprising two or more strands which, intertwining, outline small circular spaces called eyes

**GUTTA** (PL., GUTTAE)Latin term for drop(s), usually referring to the cylindrical pegs projecting from regulae and mutules on a Doric entablature

## H

HEKATOMPEDONa hundred-footer; when capitalized, it refers to an early temple on the Athenian Akropolis that probably measured 100 feet in length

HEROON (PL., HEROA)commemorative monument for a hero, whether historical or mythological, often with funerary connotations (cenotaph)

HEXASTYLEadjective indicating a six-columned façade

HUBRIS (ALSO HYBRIS)Greek term for wanton violence and insult arising from excessive pride or self-aggrandizement, often resulting in retribution by the gods

HYPOSTYLE HALLan Egyptian type of room (roofed area) filled with many rows of columns

**HYPOTRACHELION** groove(s) under the throat-like hollow at the base of a Doric capital, masking the join of capital and shaft

I

**ILIOUPERSIS** the Destruction of Troy (Ilion)

**IN ANTIS** see anta

**INTERCOLUMNIATION** the space from column to column in a colonnade

K

**KALATHOS** Greek term for basket, usually referring to the (bell-shaped) core of the Corinthian capital surrounded by leaves and tendrils

**KARYATID** an architectural support in the shape of a female figure

KATHODOSGreek term for descent, usually to the underworld

KENTAUROMACHYlegendary battle between Greeks (usually Lapiths) and centaurs (Kentauroi)

KITHAROIDOSa Greek term for kithara player (and singer)

KORE (PL., KORAI)a standard type of Archaic statue depicting an elaborately dressed female, usually a young girl

KOUROS (PL., KOUROI)a standard type of Archaic male statue representing a naked youth with one leg forward, arms down at the sides

KREPIDOMA (ALSO KREPIS)the stepped platform supporting a Greek temple (above ground level)

**KTISTES** Greek term for the founder of a city or a colony, usually considered a hero

**KYMATION** a molding profile with double curvature resembling a wave, with the concave part either at top (*cyma recta*) or at bottom (*cyma reversa*)

## L

**LEKYTHOS** (PL., LEKYTHOI) a slender cylindrical jug with narrow neck and one handle, often containing perfumed oil offered to the dead

**LESCHE** (PL., LESCHAI) Greek term for lounge, club-house; a building of undetermined plan but probably close to a stoa

**LOUTROPHOROS** (PL., LOUTROPHOROI) a tall narrow vase with flaring mouth used to carry water for a ritual bath, connected with either a marriage ceremony or a funeral

## M

**MAUSOLEUM** A highly elaborate tomb building; the Latinized form of the name is derived from the Maussolleion, the tomb of the Karian ruler Maussollos (died 353 B.C.E.)

**MITRA** A band worn around the head crossing the forehead, typically seen on Apollo and Dionysos

**MOLDING** A narrow, profiled member employed to divide or define the edges of surfaces, to support or crown more important members, or to separate other moldings; often covering a join

**MONOPTEROS** A structure without walls, surrounded only by columns, usually circular

**MOSCHOPHOROS** A Greek term meaning calf-bearer; a statue type

**MUTULE** (PL., MUTULES)a rectangular slab projecting from the soffit of the Doric cornice, usually in correspondence to the triglyphs on the frieze course below, and delimited by viae; traditionally decorated with three rows of six guttae each, although variations occur during the Archaic period

## N

**NAISKOS**a small temple, usually without a surrounding colonnade

**NAOS**the Greek term for a temple, specifically the main room (cf. cella)

## O

**OCTASTYLE**having eight columns across the front

**OIKOS**a Greek term for house, also used for the main (dining) room in the house itself

**OPISTHODOMOS**the rear porch of a temple

**ORTHOSTATE(S)**thin and tall slabs set upright at the bottom of a wall (forming a dado), above which the regular wall courses begin

P

**PALMETTE**a floral pattern with pointed or flame-shaped petals arranged in descending order on either side of a tall central petal

PARASKENION (PL., PARASKENIA) one of two symmetrical and projecting wings at the end of a stage building in a theater

PELTAA shield form typically used by Amazons, somewhat resembling a moon crescent

PERIEGETE Greek word for guide (when capitalized, referring to the author Pausanias)

PERIPTERAL having one row of columns all around

PERISTASIS another word for peristyle

PERISTYLE a colonnade surrounding a building (usually a temple) or a space (e.g., the inner courtyard of a house)

PERSIKOMACHY battle between Greeks and Persians

**PHIALE** (PL., PHIALAI)a Greek term for a shallow bowl usually employed for libations (cf. Latin *patera*)

**PINAKOTHEKE**Greek term for picture-gallery; when capitalized, it refers to the NW room of the Athenian Propylaia, which housed easel paintings

**PINAX** (PL., PINAKES)Greek term for a wooden board, usually painted or inscribed; easel painting

**PITHOS** (PL., PITHOI)Greek term for a large-mouthed storage jar, usually quite sizable

**PLEMOCHOE** (PL., PLEMOCHOAI)a low lidded bowl with wide shoulder and high foot, primarily used in ritual

**PLINTH**a square, rectangular or even formless block used as a base, either for a column or a figure; in the case of a sculpture in the round, the plinth is usually in one piece with the statue

**POLIS** (PL., POLEIS)a Greek term meaning city (usually city-state)

**POLOS** (PL., POLOI)Greek term for a tall, cylindrical headdress, usually connoting a divinity

**PRONAO**Sthe front porch of a building

**PROPYLAI**Athe gateway to the Athenian Akropolis, which had five doors

**PROPYLON** (PL., PROPYLA)a Greek term for gateway, usually a covered structure comprising both a door-wall and fronting columns

**PROSTYLE**having columns in front of the antae (q.v.; contrast "in antis")

**PROTOME** (PL., PROTOMAI)the head and neck of a figure, whether human or animal (usually less extensive in length than a bust)

**PSEUDO-DIPTERAL**adjective describing a dipteral building with the inner ring of columns omitted

**PTEROMA**the covered space between the wall and the outer colonnade surrounding a temple

**PTERON**Greek word for wing, indicating one side of the peristyle of a temple; often used with the same meaning as pteroma

## R

**REGULA** (PL., REGULAE)a ruler-like bar under the tainia of a Doric epistyle, usually decorated with hanging guttae

**RIDGEPOLE**the main horizontal beam at the apex of a roof spanning a building lengthwise; the large tile that covers it is called the *kalypter hegemon*

**RINCEAU (PL., RINCEAUX)**a leaf-chain pattern with curves and S-scrolls

## S

**SOFFIT**the exposed bottom surface of an architectural member usually belonging to the entablature

**STOAA** Greek term for a portico-like building fronted by a long colonnade

**STRING COURSE** a narrow masonry band inserted into a wall and contrasting with the size of the other wall blocks

**SUNK RELIEF** an Egyptian form of carving in which the contours of a two-dimensional image are cut deeper than the central portions and are thus "sunk" below the surface of the decorated plane

**SYNOIKISMOS** Greek term for the unification of many towns/districts under one capital city

## T

**TAINIA** a ribbon; specifically, the projecting band atop the Doric epistyle (cf. fascia)

**TELAMON** (PL., TELAMONES)an architectural support in the shape of a male figure

**TEMENOS** (PL., TEMENE)a Greek term for a sacred precinct, usually surrounded by a wall

**TETRAKIONION**pavilion composed exclusively of four columns and a roof

**TETRASTYLE**adjective indicating a four-columned façade

**THOLOS** (PL., THOLOI)a round building, with or without peristyle

**TOICHOBATE**a molding decorating the base of a wall

**TREASURY**small temple-like building dedicated by individual states at a major sanctuary, to house the offers of that state's citizens

**TYMPANUM**the Latin term for pediment, especially indicating the triangular wall that closes the open frame created by the horizontal and the raking cornice. After a musical instrument (Greek tympanon) of triangular or oval/round shape

V

**VIA (PL., VIAE)**Latin term for street, used for the narrow sloping space between the mutules of a Doric cornice

## Chapter 1

Why:

The Advantages and Limitations of  
Studying Greek Architectural Sculpture

It is a widely held opinion that architecture is the most political of all visual artsindeed, if "political" is taken in its etymological sense of "everything that pertains to a *polis*," public buildings would surely represent that polis' most permanent and official statements. Such statements in turn may be influenced by the specific form of government prevalent at the time of constructionwhat we would normally take as the primary modern meaning of the term "political." But obviously many other factors come into play: local traditions, religious considerations, financial resources, intended setting, availability of materials.<sup>1</sup> Yet there is to any building an underlying sense of function, whatever that function may be, that makes its construction necessary, for whatever reasons, at a specific moment in time.

The same cannot be said for architectural sculpture. A building can exist, and be perfectly and totally functional, without external embellishment of any sort, let alone sculpture. The aesthetic component of a structure may reside, for instance, in its pleasing proportions, the arrangement of its windows, or the beauty of its materials (which today seldom consist of the prohibitively expensive cut stones, not to mention marble), but it certainly need not find expression in figured friezes, freestanding statuary, or elaborately carved moldings. Even some of the most colorful buildings erected in recent times for instance, Erdman Hall by Louis Kahn, on the Bryn Mawr College campus<sup>2</sup> rely on tex-

tural contrasts, different types of material, and original plan, to create a response in the viewer. Sculpture is nowhere to be found.

In antiquity, however, and especially in Greece, official structures were seldom built without stone, and the difference between stone cutting and stone carving was not as sharp as we think of it in our days. In turn, architecture and sculpture, especially in relief, were not divorced from painting, and the line between decorative and functional was very difficult to draw. That such a distinction need be made might even be a modern construct with no correspondence in ancient thought, as we shall examine in future chapters. Here it is important to establish, even if in preliminary form, what is meant by architectural sculpture.

In strictly contemporary terms, there is little that may qualify, unless the building cited makes an intentional reference to classical antiquity or the Middle Ages. Somewhat earlier examples, like the elaborate façades of the Academy for the Visual Arts in Vienna or the Arts Museum in Gothenburg, Sweden, with their array of replicas of famous ancient statues, are clearly meant to advertise their function as repositories of artistic culture, even if they do not actually resemble specific prototypes.<sup>3</sup> But their statuary is not woven, as it were, into their structural fabric, and could easily be removed or exchanged without compromising the validity of either the sculpture being replaced or the location from which it was taken. To some extent, this form of architectural embellishment is comparable to that of certain Roman buildings for instance, the Colosseum in Rome, which, according to some views, once held a statue in each of its arches.<sup>4</sup> They are all gone now, so that their very presence can be dis-

puted; yet the main point is that the structure can exist without them, although they might have added considerably to the impressiveness of the original appearance.

The Romans' formulas for architectural sculpture in part took inspiration indeed, even some actual statuary, as *spolia*<sup>5</sup> from the Greeks; but their pediments were steeper and shallower, therefore more difficult to fill; their continuous friezes were seldom narrative; and their preferences, at least till the early Empire, may have been still influenced by the Etruscan tradition of independent figures set out in a row along a ridgepole witness the roof adornment of the Agrippan Pantheon, that Pliny suggests was less admired than it deserved because it was placed so high.<sup>6</sup>

Greek architectural sculpture, by contrast, was an intrinsic part of each building, so that it could not be removed without physically affecting the structure or without seriously weakening its own aesthetic value



and content. Continuous friezes and relief metopes, for instance, were built into the courses of the entablature, in specific preordained positions. Pedimental statuary, when not in relief, was still conditioned by its original triangular frame, and was less carefully finished in its non-visible parts. Even akroterial figures, although conceived as fully in the round, were meant for a specific viewpoint and had flattened or perfunctory backs that facilitate their identification today, when they are mostly found away from their original setting and could be mistaken for free-standing monuments. 7

In this interdependent (I could almost say co-dependent) relationship with its architectural frame, Greek architectural sculpture is, and was in antiquity, virtually unparalleled. The closest items to such sculpturally embellished temples as that of Zeus at Olympia or the Parthenon in Athens are perhaps the great mediaeval cathedrals with their religious programs filling portals and niches with narrative and edifying carvingsa comparison to which we shall return. Other ancient cultures, from which the Greeks could have derived their inspiration, seem to have had entirely different approaches to architectural sculpture.

To go in depth into Egyptian, Mesopotamian, and other forms of art contemporary with that of the ancient Greeks is here rendered impossible by constraints of space, but within the limits of my superficial knowledge a few points can still be made, more to highlight the differences than to explore the essence of each culture in its approach to architectural formulas. The obvious place to begin is Egypt, not only because it is historically attested that its monuments were accessible to the Greeks at the time when they were developing their own artistic forms, but also because the Egyptians had such intense concern for permanence and such readily available supplies of limestone and granite that their religious and funerary sculpture and architecture could be entirely wedded to stone. Yet partnership between the two forms was not a balanced affair.

Egyptian columns, especially those of hypostyle halls (and the majestic one at Karnak<sup>8</sup> comes most readily to mind), were usually quite tall and massive, densely spaced, in a display of strength entirely disproportionate to the weight of the superstructure they had to support. Far from being "the measure of all things," man was utterly dwarfed by these gigantic pillars within vast spaces dimly lit and intentionally mysterious. This Egyptian "forest of columns" is now understood as an intentional re-creation of the reedy marshes from which all life sprang;

the lotus and papyrus capitals, as well as the spiky leaves usually rendered at the bottom of the shafts, are obvious symbolic representations of this vegetal world.<sup>9</sup> Yet this imitation of natural forms is weakened or even negated by the elaborate carvings covering the shafts themselves. Such hieroglyphs and figures traditionally emphasize the might of the pharaoh and the power of religious ritual, but, by Greek standards, they are static and repetitious, entirely formulaic, too far from the viewer to be comprehended, much less appreciated, given their scale and placement. Even more significantly, these carvings, often in the so-called sunk relief typical of the New Kingdom, may seem to violate the integrity of the stone and thus to undermine the supporting function of the shaft, like that of a tree trunk riddled by worm tracks.

Egyptian walls are often covered with reliefs, but the images find their own space without regard for courses and joins, cutting across them like pieces of a gigantic puzzle that respect only the outermost frame. The resulting scenes are made readable not by volume or by play of light and shadow against an even background since the reliefs, even if not "sunk," are usually extremely low but by paint, which makes the distinction between sculpture and painting almost impossible to define; indeed, the two forms in Egypt are interchangeable and in some tombs occur side by side.<sup>10</sup>

Sculpture in the round was used within architectural contexts, but, with its size and massiveness, almost in competition with them, like the many statues filling the intercolumniations of Ramesses II's courtyard at Luxor, which thus destroy the pleasing alternation of voids and masses that a colonnade could produce; or like the Osirid images of the same pharaoh set against the pillars of the second court in his funerary temple (the Ramesseum), which almost entirely cover the supports yet themselves have no structural function.<sup>11</sup> Even the Hathor capitals from the great complex of Queen Hatshepsut at Deir el-Bahri cannot be considered the equivalent of the Greek Karyatids, given their minimal architectural purpose.<sup>12</sup> The colossi of Ramesses II at Abu Simbel are a more intrinsic part of the temple façade since, like it, they are carved out of the living rock; but they give the impression of being statues in the round set against a front, like those from many other temples.<sup>13</sup> They

could be removed (as in fact they were, albeit almost surgically, during the recent relocation) without affecting the aesthetic validity and the integrity of the architectural whole.

Mesopotamia, by contrast, is a land with little natural stone, and only with the northern Assyrians can we speak of architectural sculp-

ture. Yet they are part of the same tradition of builders in mudbrick, who tend to reinforce the bottom of their walls with the stronger material—hence, the "alabaster" orthostates that line the corridors and rooms of the Assyrian palaces. Here too, however, relief is quite low, once made visible primarily by the now-lost paint, and the integrity of the sculpture is often violated by the cuneiform message almost cruelly incised across the figures of genii, courtiers, and kings processioning along the stone surfaces.<sup>14</sup> Once again, it is the height of the dado that determines the frame to the composition, not the architectural structure per se. Individual figures occupying single orthostates could be removed without losing their visual efficacy, as shown by the many Assyrian reliefs often brought to the United States by American missionaries to Mesopotamia and now proudly displayed as isolated panels in many small museums across the country.

Persian art may come closest to the Greek, perhaps because in contact with the Greeks themselves. Column capitals and bases, although still symbolic and disproportionately tall by human standards, function visually and literally as true supports. Reliefs, especially those in doorways and stairways, occupy well-defined spaces to which compositions have to be adapted; triangular frames at the end of the Apadana balustrade, at Persepolis, display groups of lions over bulls that fit plausibly within the sloping contours, as if within the gables of a Greek temple.<sup>15</sup> Although Persian relief is not remarkably high, it has a certain emphasis on volume and mass that makes figures stand out against the neutral background. That such figures are repetitious and monotonous if judged by Greek standards is a modern criticism that may not have ancient validity. For their symbolic purposes, Persian reliefs are as successful as Greek narrative sculpture, although the story they tell is implicit rather

than explicit, and solely one of imperial conquest and might over the unified diversity of the many subject peoples.

Greek architectural sculpture carried its own symbolism, but it could also be eminently narrative, telling stories of gods and heroes, especially at a time (the Archaic period) when contemporary sculpture in the round seemed limited to kouroi and korai. The repetition of the human figure in a static pose naked for the male, elaborately draped for the female gave only a vague suggestion of movement through the one advanced leg of the youths and the lateral gathering of the girls' skirt. The very neutral formula of kouroi and korai thus imbued them with the potential to represent both deities and humans, the living as well as the dead, like a musical instrument that can play whatever type of music a

musician wants, from classical to jazz. The various identities were conveyed solely by the so-called attributesa polos or veil for a goddess, for instance, a bow and arrow for Apollo, a helmet for a warrioror by locationa sanctuary or a cemeterywith a consistent ambiguity that was resolved only in later times. The few variations on the theme introduced a seat or a horse under the anthropomorphic figures, or placed them in a row, in paratactic arrangements that could claim to be groups solely by proximity. Action was virtually nonexistent.

Archaic architectural sculpture, by contrast, used a great variety of types and active poses. Attributes still served to identify the actors, but context was paramount, even if the viewers were expected to know enough of the story to recall at once in their mind both its antecedents and consequents hence the so-called eidetic, or synoptic, form of representation, whereby chronologically sequential phases of a myth could be depicted simultaneously as intrinsic elements of the total episode.

It is not my purpose here to embark on a detailed analysis of narrative methods in Greek architectural sculpture. Much has been written, especially in recent years, on ancient narration, and can be consulted with profit.<sup>16</sup> A later chapter will discuss the forms and meanings of certain depictions, especially as they changed with time, but that has less to do with narrative than with symbolism. Here we need to stress only the emphatic difference between the two contemporary forms of Archaic sculptural representations, from the virtual inception of Greek monumental art in stone: statuary in the round was almost totally formulaic and static, that in relief (or at least, within an architectural frame) was primarily narrative and dynamic. Why should this have been so? Or, to ask a more specific question, what was the function of architectural sculpture?

## The Importance of Greek Architectural Sculpture

In answering the above questions, technical difficulties and sculptural inexperience need not be taken into account. It could plausibly be argued that it is easier to tell a story in relief than in the round, because of the strengthening function of the background, which allows for more animated poses and greater interaction. Yet that convincing, integrated groups could be produced is shown by the relatively early (ca. 560 B.C.E.) Moschophoros on the Athenian Akropolis who forms a coherent

unit with the calf he carries on his shoulders; and stories could be told by simple juxtaposition. Conversely, some approximately contemporary pedimental figures from the same site (e.g., from the Olive Tree and the Introduction pediments) are entirely in the round, minimally supported by their frame. The longevity and wide diffusion of the kouros-and kore-types cannot have been other than intentional, as was the different nature of architectural sculpture. 17

Architectural sculpture could, of course, be considered simply a form of aesthetic trimming. That there was a certain decorative purpose in all forms of Greek carving should indeed be immediately acknowledged but equally promptly dismissed. Decoration alone was never a sufficient motive in antiquity for the development and the subsequent elaboration of architectural embellishment. In addition, there was nothing inherently compelling about the *locations* of Greek architectural sculpture which required that those specific elements of a building be filled with ornament. Indeed, those very elements were, structurally speaking, optional. For instance, there was no technical need for a frieze course in an entablature, where architrave and cornice were adequate to support the roof, and certainly no specific demand for the traditional Doric articulation of that space into triglyphs and metopes.<sup>18</sup> By the same token, a sloping roof ended in a pediment, but nothing demanded that statuary in

the round be placed at its apices, or that the triangular space itself be filled with images. Not only were other options available such as the ridgepole ornaments and the open gables of Etruscan temples but the Greek solution itself was decidedly unrealistic, implausibly placing monsters and horses and combatants on precarious roof corners and narrow ledges so high and far removed from ground level. Earlier theories of *horror vacui*, of empty spaces that had to be filled in order to prevent the infiltration of malevolent forces, are now discounted, and no other coherent explanation has replaced them. We should therefore return to the previously mentioned analogy with the mediaeval cathedrals.<sup>19</sup>

The primary purpose of the sculptures on these great churches was certainly and didactically religious, and so must have been that of the Greek buildings, since their architectural embellishment as we know it, from its very inception, seems connected with religious structures. To be sure, temples, treasuries, and eventually altars, by their very nature, tended to be built in permanent materials, as contrasted with the more temporary fabrics of human habitations. But even stone stoas, which to

some extent served a religious function within sanctuaries, received minimal sculptural decoration until the Hellenistic period; in earlier times, their primary figural adornment consisted of elaborate akroteria.

The adventures of gods and heroes, as contrasted with subjects from the Old or the New Testament, may seem to us purely entertaining tales without moral content and instructional message, yet this was probably not the ancient perception. Greek mythology understood as the series of episodes involving the various divinities may have had only a limited impact on religion and ritual, but it did form the connecting texture of Greek beliefs, and it exercised a powerful influence on everyday life so powerful, in fact, that poleis and states could manipulate it to espouse specific policies or legitimize territorial claims. A basic contrast is therefore made explicit between kouroi and korai, which were mostly the spontaneous and uncontrolled dedications of private individuals, and architectural sculpture, which belonged to buildings traditionally set up under public auspices and controls and was meant to express a permanent statement. Chapter 5 below will explore the possible political im-

plications of certain subjects; here it suffices to mention, as a specific instance, that Greek colonists, conscious of their own pioneering wanderings, seem to have given preference to travel myths over other topics, both on their own temples in their "homes away from home" (

*ἀποικίαι*) and in the treasuries they dedicated at the international sanctuaries, such as Delphi. Apollo's travels to the Hyperboreans, Herakles' raid of the Cattle of Geryon and his excursions beyond the Pillars that bore his name, Phrixos' voyage to the Black Sea on the golden ram, are all topics that are seldom or even never depicted outside a "colonial" context.<sup>20</sup> The peculiar myth of Herakles and the Kerkopes is found in stone exclusively at Selinous and Foce del Sele, both Magna Graecian sites, and even vases illustrating the subject may have been made primarily for export to the Italic settlements.<sup>21</sup> The conclusion that a definite correla-

tion existed between sponsors and the commissioned topics seems inescapable.

Architectural sculpture went beyond providing justification and heroic precedents for territorial expansion. It engendered a sense of recognition, a reinforcement of beliefs, even a diffusion of culture that can only be compared to the impact of present-day television, videos, and billboards. Although the ancient Greeks were generally literate, able to read at least public inscriptions, the transmission of epics and mythology was largely effected through oral or visual means, of which architectural sculpture was a most potent exponent. Other visual media

equally potent, to be sure were monumental painting, vase painting, and especially weaving,<sup>22</sup> but the latter two were more temporary in nature and more limited in their diffusion, circulating within privileged and restricted circles; the first is for us almost entirely lost and can only be reconstructed, vaguely and hypothetically, through the ancient notices. One more medium, however, should be mentioned, because its influence could be as strong as that of architectural sculpture, as public and as readily subject to specific manipulation: the theater.

In a recent essay, Froma Zeitlin has correctly emphasized not only the educational aspect of the various forms of monumental art promoted by the polis, but also the correlation between the development of the figurative arts and the evolution of dramaturgical techniques and concerns. She has primarily in mind issues of framed areas, coloration, perceptions of distance and proximity, general attention to pictorial space, but also the re-creation of mythological "reality" through the actions and words of the players.<sup>23</sup> This is the aspect I would stress above all others, in that drama has the ability to involve the viewers in the events unfolding on stage as if they were themselves participants in such events, and therefore open to the same emotional responses as the protagonists. A comparable response was elicited by architectural sculpture.

In the essay mentioned above, Zeitlin analyzes a passage of Euripides' *Ion*, in which the Athenian women accompanying Kreousa to Delphi exclaim in pleasure and wonderment in front of the facade of the Temple of Apollo at Delphi (vv. 184-218). The primary reaction of the chorus is one of recognition and pleasure: this is their patroness Athena, these are the stories they weave on their loom. The myths described by the playwright may or may not have appeared on the Archaic Apollonion, and he may have taken the poetic liberty, for his own dramaturgical purposes, of transposing to the front the Gigantomachy filling instead the western pediment. But, beyond recreating a specific locale for his audience through the verifiable description of what was surely a frequently visited monument, Euripides achieved two other objectiveshe conveyed not only that the Athenian women felt at home in the unfamiliar environment, as Zeitlin points out,<sup>24</sup> but also (and more importantly, to my mind) that

they identified with the architectural sculptures they saw in a personal, proprietary sense: their goddess (v. 211), *not* an image of their goddess; their stories (vv. 96-97),<sup>25</sup> *not* simply the depiction of stories which they happened to know. It is this personal response, as if to real-life happenings, that characterizes the impact of both a theatrical representation and an architectural sculpture on the general viewer.



In a penetrating book, David Freedberg has argued that "our responses to images may be of the same order as our responses to reality," and that "everything about the picture and the sculpture demands that we see both it and what it represents as a piece of reality." Far from its being the uncultured, unsophisticated response of a primitive culture, this he believes is a universal reaction to a work of art (of any quality, not necessarily a masterpiece) that we have tended to suppress, almost as if ashamed to acknowledge it, hiding behind the more accepted approaches of formal analysis and historical investigation.<sup>26</sup> Particularly important for our topic is Freedberg's acknowledgment (p. 438) that emotional response is not conditioned by the greater or lesser naturalism of the image being viewed lest we doubt that the disproportionately large heads, impossibly twisted stances, and artificially poised actions of, say, some Selinous metopes could be taken seriously by the spectators. To the con-

trary, those very staring, overlarge eyes, the emphatic albeit unnatural frontality of those images, must have created a direct rapport with the viewers that enhanced their sense of awe and recognition.

So far, these aspects of architectural sculpture have concerned its possible importance for the contemporary Greeks. For the modern researcher, three additional features are of great value.

The first is that when we study carved metopes and friezes, pedimental compositions, and akroteria, we are almost always dealing with "Greek originals" as contrasted with the better known, and notorious, "Roman copies" of Greek free-standing monuments.<sup>27</sup>

By Roman copies we traditionally mean works that go back to specific Greek prototypes, most often of Classical or Hellenistic date, and which by and large are now lost. We have tended to believe that Roman patrons, or at least wealthy citizens who lived during the Late Republic and the Roman Imperial periods, wishing to own Greek masterpieces but unable to acquire the original sculptures, commissioned (frequently Greek) artists to produce replicas of the desired object. Such replicas have formed the cornerstone of our inquiries into the oeuvres of Greek masters, even when we knew that the original was in bronze and that the marble copy had to rely on struts and other changes to accommodate the more fragile nature of its medium. We also felt confident that we could succeed, through a discerning analysis of more than one replica of the same prototype (the so-called *Kopienkritik*), in recovering the traits of the original as against the variations in-

troduced by each different copyist. Now our faith has become less firm, as we realize that

each marble sculpture reflects not only the carving style but also the tastes of the time when it was made, and that reproduction of the prototype can range from accurate copying to simple imitation, adaptation, and even transformation to serve the purpose for which the copy was commissioned. Under these circumstances, if the Greek prototype can be glimpsed at all, it is indeed as if "through a glass, darkly."

The second feature regards chronology. Greek originals in the round, even when they survive, can rarely be dated with precision on external grounds. Historical connections, external circumstances, inscriptional evidence, and signed bases<sup>28</sup> can seldom be brought to bear on our dating assessments, which therefore rely primarily on stylistic analysis. Given the Greek tendency to "quote" from previous styles at all periods (so that, for instance, Archaic leads to Archaizing and Archaistic, Classical to Classicizing), these formal evaluations inevitably tend to be subjective and discordant, thus receiving only relative acceptance among students of ancient sculpture. Architectural sculpture, to be sure, can also be dated on stylistic grounds, but the style of the building to which it belongs, with its own independent development (of proportions, plan, moldings, and other features), provides an additional criterion for our consideration. Public structures, moreover, may be mentioned in build-

ing accounts, which carry their own dating (usually by magistrates' year). Finally, excavational evidence may be available through soundings in the foundations, thus yielding corroborating information. In general, therefore, architectural sculpture, if properly assigned to its structure, is more assuredly and convincingly dated than free-standing monuments.

The third feature is more elusive, but nonetheless significant. Through the diffusion of distinctive architectural forms and decorative preferences, contacts among widely separated areas can be postulated that would have remained unsuspected otherwise, thus increasing our knowledge of ancient practices.<sup>29</sup>

These, therefore, are some of the reasons why architectural sculpture should be the focus of our study. It is an unadulterated expression of Greek art, often with considerable aesthetic appeal. It can usually be dated with greater precision than sculpture in the round, because of its association with specific buildings. It can attest to regional preferences and to widespread contacts not known through written sources. It is a major indicator of Greek culture in that it made an official and permanent statement intended to be seen by all, citizens and foreign visitors

alike. It was meant as a significant educational tool, in that it visibly codified something of local lore and religious beliefs. It could be used to promote specific versions of myth that supported political or legal positions. It engendered a response that was both emotional and intellectual, in that different layers of meaning could be read into each story told. If we could penetrate even some of these various layers, we would be much closer to an understanding of the ancient Greeks, even beyond that available from the literary sources.

## The Limitations of the Study: The Literary Sources

We have so far enumerated some of the reasons why the study of Greek architectural sculpture is important and rewarding. We should now consider some of its strictures, and specifically the limited and often misleading role played by the ancient literary sources.

This situation is particularly regrettable, in that the Sather Lectures are given under the auspices of the Department of Classics, and it would be not only proper but also highly desirable to give a large share to the Greek and Latin authors in discussing my topic. Yet almost all of them virtually ignore architectural sculpture, or mention solely the stories it told, as we shall see in a brief review.

To be sure, I am not a philologist and cannot claim to have made a thorough search of all ancient testimonia. This task should be undertaken by somebody much better qualified than I. Yet the rationale behind the writings of the various authors may help explain, to some extent, their reluctance in dealing with architectural sculpture.

The great Classical philosophers Sokrates, Plato, and, to a lesser extent, Aristotle were not particularly favorable to art, which they considered misleading, or at least not immediately concerned with the ethical purposes that they thought essential for the education of the young. If any art work was mentioned (in their own writings or those of their pupils, in the case of Sokrates), it was usually sculpture in the round or painting, which was then berated as an imitation of an imitation, twice removed from reality. Since paintings often told a story, like architectural sculpture, I am surprised that the former took precedence over the latter in attracting philosophical attention, especially since Sokrates, and to some extent Plato, lived during the exciting years of the reconstruction of the Akropolis and its immediate aftermath. It is also

significant that both Plato and Aristotle group the visual arts with poetry and the theater, considering both manifestations potentially dangerous if not properly directed, and thus acknowledging, albeit indirectly, the enormous power of images over the viewers.<sup>30</sup> If the multi-layered symbolism that we attribute to the Parthenon sculptures was indeed being discussed in fifth-century Athens, the silence of these most eloquent teachers seems particularly striking.

Dramatic poets might be expected to be more sympathetic to architectural sculpture, given their own dependence on stage setting and their use of imagery, and we have already cited the instance of Euripides' *Ion*. Yet poetic license renders some mentions untraceable or imaginary,<sup>31</sup> and they are few and far between. The same situation seems to obtain with poets of other genres. A Pindaric allusion will be cited in a later chapter, but a more general statement can be made here about epigrams and *ekphraseis*, the genre describing works of art that became popular in Hellenistic and later Roman times.<sup>32</sup> Most of them refer to sculpture in the round, some of it at small scale, without necessarily specifying location and placement. The well-known fourth mimiambos of Herondas used to be localized at Kos, and the two conversing women were thought to be admiring the sculptural decoration of the altar of Dionysos by Kephisodotos and Timarchos, the sons of Praxiteles. Current opinion

would disclaim that the event takes place on that specific island; moreover, the sculptures cited are dedications in the round set up independently within a colonnade. Nineteen very late (fourth or sixth century C.E.) epigrams describing *stylop-inakia* (relief panels?) on the columns of the second-century B.C.E. temple of Queen Apollonis at Kyzikos have been used as basis for tentative reconstructions, but more recent interpretations stress their purely literary character.<sup>33</sup> In brief, poets seem more concerned with creating a masterpiece of their own or flattering their patrons than with respecting faithfulness and objectivity; architectural sculpture is virtually absent from their verses.

By discussing poetry, we have moved beyond times approximately contemporary to the architectural sculpture under investigation. Four major sources of Imperial date remain to be mentioned, and their contribution is both invaluable and invalid, since, regardless of their birthplace or the language in which they write, they seem to look at the world with Roman eyes.

The earliest compilation is Vitruvius' *De Architectura*, in ten books, probably written between 40 and 15 B.C.E., but clearly meant to catch

the attention of the emperor Augustus who was rebuilding Rome, and of the learned Roman people in command for whom the picture of architecture as a humanistic discipline would have been appealing.<sup>34</sup> Vitruvius stresses that the ideal architect, among other subjects, should know history, to answer questions by possible inquirers about the meaning of some ornamental elements on his buildings (1.1.5). Yet as an example he cites the use of Karyatids (to which we shall return in future chapters), for which his explanation seems historically inaccurate (despite the occasional defense by modern scholars); in addition, he visualizes the Karyan women as captives marching in the triumphal procession in their long matronly robes, thus painting a picture that makes sense primarily in Roman terms.<sup>35</sup>

Other architectural sculpture is not mentioned at all. Vitruvius cites the reliefs of the eight Winds on the Horologion of Andronikos of Kyrrhos in Athens (1.6.4), and the bronze Triton that in turn points to each one with its rod, functioning as a weather vane at the apex of the roof. But here the focus is on the winds, which should be taken into account in the layout of a city. Sculptural description is nonexistent. The only references I could find to decorated buildings of the Greek period are given within the context of books written by their architects (7. praef. 11-16), which therefore interest him primarily as works of architecture. Such treatises as Vitruvius has consulted, moreover (some sixty, by his own account) seem primarily concerned with symmetry, proportions, and machinery, and he laments that other architects who could have written have not done so, but nothing suggests that architectural sculpture was included, or would have been considered, in any of these works. Within the same

section (16-17), Vitruvius mentions four places where temples are, or have been finished, in marble and therefore are most renowned at his time: Ephesos with the Artemision, Miletos with the Didymaion, Eleusis with the Telesterion by Iktinos and the portico added by Philo, and Athens with the Olympieion. None of these buildings is strictly contemporary with Vitruvius, and therefore his omission of the Parthenon entirely in marble, and thus a potential candidate for his list is more significant than his inclusions. We tend to quote from ancient authors when they say something pertinent to a subject of our interest, but it is equally necessary to stress what they do not mention.

Strabo (from Amaseia Pontica), like Vitruvius, wrote the seventeen books of his *Geographika* for the elite Romans who were ruling the inhabited world and therefore would need to know the different lands and peoples they encountered around the Mediterranean shores. Al-



though he wrote in Greek, and must have had at least some Greek readers in mind, he was clearly an admirer of Roman power, having lived for some time in the Capital, despite his extensive travels. The actual date of compilation for the entire work is disputed, but, on contextual evidence, it was probably revised and updated by its author around 18 C.E.; yet it did not receive final touches and was published posthumously, perhaps after 25. The three books (8-10) that deal with Greece, however, have no supplements, and may have been written as a whole within a relatively short period, no later than 2 B.C.E. 36

Many of Strabo's descriptions are due to direct observations, but he often cites earlier sources even for some of the sites that he might have visited; others (like Olympia) he appears to have had no desire to see, although he mentions that he was in Corinth during the Spring or Summer of 29 B.C.E. His primary objective seems to verify the validity of Homer and especially of the "Catalogue of Ships"; he is therefore more concerned with topography than with periegesis. Under the geographical veneer, moreover, always lurks the historian who had already written forty-seven books of *Historical Commentaries*. Strabo does mention some important monuments, but more as a form of identificationRhamnous with the statue of Nemesis ("either by Diodotos or by Agorakritos"), for instance than as an artistic commentary, and his focus, if any, is on statuary in the round, not on architectural sculpture. His treatment of the entire Akropolis in Athens is limited to a few sen-

tences. In many other such cases, he relies on his sources, which might not have been correct in matters of artistic attribution but which he is not interested in disputing, given his different purposes<sup>37</sup>

Entirely different purposes were also those of Pliny the Elder, whose *Historia Naturalis* in thirty-seven books has nonetheless become one of our main references on the subject of ancient sculpture. Yet this Roman from Gallia Cisalpina, who perished dramatically at the age of 56 during Vesuvius' eruption in 79 C.E., was writing on natural resources, not on artistic masterpieces, and his primary aim was moralistic and laudatory, as has been recently emphasized.<sup>38</sup> It is unsettling to realize how many of our current artistic attributions and aesthetic judgments were made on Pliny's authority, despite his explicit bias and declared program, with its unrealistic insistence on the naming of the *protoeuretes*, the initial discoverer of each invention or the first practitioner of each technique.

Yet, for all of Pliny's inclusion of the visual arts (painting, gem carvings, sculpture in bronze and stone), he entirely omits architectural or



relief sculpture from consideration, whether Greek narrative or Roman historical. It has been suggested that relief sculpture was not one of the accepted genres, and that Pliny's own sources dealt only with sculpture in the round. Even his references to temple embellishments seem to concern three-dimensional pieces; and he speaks of the Greek Niobids in the Temple of Apollo Sosianus, but fails to draw attention to the Greek Amazonomachy on its gable.<sup>39</sup> Other sites receive attention because of unusual phenomena: Olympia is cited for its portico with a seven-fold echo (36.100); the Ephesian Artemision attracts special mention because of the difficulty in lifting the architrave block into position (36.95-97); the Maussolleion at Halikarnassos rates a lengthier commentary (36.30-31), but it deserves inclusion primarily as one of the Seven Wonders of the World, in keeping with Pliny's interest in the exceptional and the miraculous.

The most important ancient source, for our purposes, is certainly Pausanias, probably from Magnesia on Mount Sipylos in Lydia, who wrote a *Periegesis* of Greece, in ten books, from approximately 155 C.E. to some time after 175. Here at last is an author who set out to mention the most significant artistic monuments of Greece, and who probably considered himself a Greek yet his world was Roman. Inevitably, he therefore looked with "Roman" eyes, and noticed what was of concern to him, sharing the preference of his time for artifacts and events of the fifth and fourth centuries B.C.E., rather than for those of later periods. Pausanias does indeed mention some Hellenistic history and works of art, but these are few in comparison with the bulk of his review, and some very obvious and admirable Hellenistic structures for instance, the Stoa of Attalos in the Athenian Agora are omitted despite his historical account of the Attalids, who

were almost forgotten by the Antonine period (1.6.1).<sup>40</sup>

What Pausanias mentions of the plastic arts is almost always sculpture in the round: the cult images, the victory statues at Olympia, the portraits of important men, even a few curiosities. Architectural sculpture is rarely included, and when it is, it attracts attention because of its subject matter rather than for its beauty, although some masters are named, if perhaps unreliably. In a few cases where the archaeological record has allowed us to verify Pausanias' statements, we have found it both invaluable and imprecise. Some significant instances may be briefly discussed, by locale.

In Athens, were it not for Pausanias (1.24.5), we would not have known the themes of the Parthenon pediments, given their present dam-

aged condition. But the 92 high-relief metopes that surround the entire temple with violent action rate not a word of description, and neither does the continuous frieze. To us this solemn and varied procession seems a most splendid achievementa unified composition artfully arranged to accompany the spectators' progress toward the front of the building, and layered with hidden meanings. To Pausanias, according to some indulgent commentators,<sup>41</sup> something so far from the ground "was hardly more than tall, graceful calligraphy." We shall return to the Parthenon frieze in later chapters, to explore both its visibility and its possible meanings; here we should mention just another possibilitythat Pausanias, as a "Roman," is basically unaware of continuous friezes, which in his time were no more than glorified moldings and carried no narrative content.<sup>42</sup>

To be sure, Pausanias omits to describe the entire elaborate decoration of the Nike Temple (akroteria, pediments, friezes, and balustrade), thus leaving modern commentators without help in interpreting the true nature of its sculptural program, whether mythological or historical; only the ancient cult image within the building receives a brief mention, in a different context.<sup>43</sup> Certainly, the quantity of important monuments on the Athenian Akropolis prevented a detailed account from a man acutely conscious that he still had to describe "the whole of Greece." But one omission remains surprising: Pausanias never alludes to Pheidias in connection with the Parthenon pediments, although he states their subjects and speaks about the chryselephantine Athena. Yet at Olympia he names (erroneously) Paionios for the east, Alkamenes for the west gable of the Temple of Zeus, and at Delphi he specifies the sequence of masters who carved the pediments of the fourth-century Apollonion: first

Praxias, then Androsthenes. We must assume either that Pheidias' role in the decoration of the Parthenon was not (or no longer?) significant, or that Pausanias considered the information irrelevant. Yet this latter possibility seems unlikely, in view of the Periegete's great admiration for the Athenian master.<sup>44</sup> This issue also will be discussed in chapter 6 below.

The Temple of Zeus at Olympia provides a good example of both the value and the imperfections in Pausanias' account. Although he names improbable sculptors for the gables, he gives the themes correctly yet, on the west façade, he identifies the central figure as Peirithoos, although that majestic youth towering above all others, with his old-fashioned upswept hairstyle, can only be Apollo. His identifications of other figures on both pediments have also been questioned. Exceptionally,

for this temple Pausanias mentions also the carved metopes over the porches, which probably interest him because of Herakles' connection with the games. But while his description of the eastern set as being "above the temple door" can be justified (although inaccurate), a similar reference to the western series as being above the opisthodomos door appears archaeologically incorrect, since to our knowledge no opening pierces the wall of the rear porch to allow access into the cella. 45

Pausanias seems more interested in the dedicatory weapons hung on temple entablatures, since he refers, for instance, to the 21 gilded shields placed by Mummius on the outside frieze (

*ζώνη*

) "above the columns" of the Temple of Zeus at Olympia (5.10.5), and to the weapons on the architrave (*επιστύλια*) of the Apollo-nion at Delphi (10.19.4), with what appears to be precise terminology. But he uses almost the same phrasing to refer to what might be carved metopes, or both metopes and pediments, or even pediments alone, at the Argive Heraion (2.17.3): "the sculptures above the columns represent, some the birth of Zeus and the battle between the gods and giants, others the Trojan War and the taking of Ilium." Architectural evidence now tells us that carved metopes existed not only on the outside but also above the porches, and that one pedimental composition at least showed the Ilioupersis. Since some reliefs include Amazons,

it has been assumed that Pausanias read this metopal Amazonomachy as part of the Trojan War and that he was therefore referring sequentially to frieze and pediment, looking upward from the

columns (*ὑπέρ τοὺς κιόνας*). On the other hand, he might have considered the Trojan War as the necessary preliminary to the Fall of Troy and have thus synthesized the cause and consequence of the pedimental story.<sup>46</sup> Whatever interpretation we wish to give Pausanias' text, it is obviously not precise or detailed enough to describe what must have been, in the writer's time, an elaborately decorated building, adding confirmation to its limited value for architectural sculpture.

As a final comment, we may contrast Pausanias' interest in all religious structures, which he mentions even when in ruins, with the paucity of his references to pedimental sculpture. A search with the Ibucus computer reveals that the phrasing "*ἐν τοῖς ἀετοῖς*" occurs only in four additional contexts, although many other structures must have still had adorned gables in Pausanias' times,<sup>47</sup> and of these four, only one (at Tegea) can be verified archaeologically. For the Herakleion at Thebes, the Periegete cites "most of the labors of Herakles" which he attributes to Praxiteles. The depiction of different deeds within one or even two

pediments seems surprising, and one wonders whether Pausanias may have been referring to metopes, despite his formulaic phrasing. That he included the information at all may be due to the Praxitelean attribution, although he may have been misinformed by the local guides.

## Other Limitations of Architectural Sculpture

Should we take this relative lack of interest by the ancient authors as indication that the importance we assign to architectural sculpture is more modern than contemporary? I am convinced that this is not the case, for the various reasons stated above, and that those authors who could have told us the most were conditioned by their Roman environment, which had considerably lessened the programmatic role of sculptural decoration on temples. I am equally convinced, however, that the ancient Greeks valued their carvings primarily for their religious/mythological message rather than for their aesthetic appeal, and that execution was left in the hands of masters different from those who created the all-important temple images.

To be sure, even the great chryselephantine idols, in my opinion, were appreciated more for their awesome size and the costly splendor of their materials than for their style. But building accounts, when they survive, confirm the impression that other masters, rather than the "famous" ones, carved the architectural sculpture: those on the Erechtheion frieze list numerous names of otherwise unknown sculptors; those at Epidauros seem to distinguish between Thrasyphedes of Paros, who made the gold-and-ivory Asklepios, and the over forty hands who may have worked on the various carvings.<sup>48</sup> Even to judge from Pausanias' account, only Praxiteles may rank as a major artist engaged in decorating a gable, but, as already stated, this unique attribution could be challenged. Pausanias' omission of Pheidias' name in connection with the Parthenon structure was also noted above. At Tegea, Skopas is mentioned only as architect; at Delphi, Praxias and Androsthenes do not seem to rank as major fig-

ures, from what else we know about them; at Olympia, Paionios and Alkamenes' names may represent erroneous attribution. We shall return to the issue of masters in the last chapter. Here, let us briefly consider the sculptures themselves.

In one specific case, in studying the original fragments, we can note their approximate finish and ruthless hacking for insertion into a tight-fitting triangular frame: Andrew Stewart has carefully analyzed the style and execution of the Tegean pediments, although he retains the

traditional attribution to Skopas. To be sure, the extant pieces convey a great deal of vigor and pathos, but they cannot be ranked as careful products meant for close viewing. Even the Parthenon sculptures, for all their outstanding quality, are not exempt from blemishes and recuttings; all the pedimental figures, for instance, exhibit perfunctory backs and a few drastic excisions of drapery and anatomical details. The most dramatic example is provided by the Olympia gable sculptures, where halved bodies of horses and centaurs and unfinished hairstyles cannot be ascribed solely to later repairs. 49

We must acknowledge that we tend to overvalue such sculptures because they are among the few Greek originals left for us to admire. Note the comparable case of the Amazonomachy frieze slabs from the Halikarnassos Maussolleion which, until quite recently, were consistently attributed to the four masters mentioned by Plinysimply because they happened to have survived. A revised understanding of the entire Karian building has shown that great numbers of statues in the round decorated the steps of its podium, its intercolumniations, and its roof; it is therefore unlikely that the more established sculptors would have devoted their time to the execution of what, from the ground, must have indeed looked like a glorified molding, playing a minor role in the decoration of the whole grandiose tomb.<sup>50</sup>

Workshop production, therefore, rather than masterpieces by famous hands yet this may not be the primary drawback of architectural sculpture for our study. Far more serious is the fact that much of this material was deliberately defaced (by Christians or other agents), fed to the lime kilns, or simply destroyed with the buildings to which it belonged. When the remains are highly fragmentary, the stories they tell are hard to reconstruct. Not much better is the situation with almost entirely preserved compositions that yet correspond to no known myth and defy positive identification: the east frieze of the Hephaisteion, for example, or that from the Ilios Temple, not to mention the various interpretations offered for the friezes of the Nike Temple and of the Parthenon itself. Some sculptural narratives can be connected with lost poems known through later accounts and summaries such as the *Aithiopis* by Arktinos of Miletos that inspired the east frieze of the Siphnian Treasury at Delphi;

but other sources may have disappeared without trace, or we may be unable to detect their echoes either in words or stone.

We have already mentioned the problem of fitting sculptures within restrictive frames, but Greek architecture functioned like a Prokrustean bed: we should therefore consider the opposite difficulty of having to



stretch narratives to fill all available space. In a triangular gable, the challenge was to find suitable subjects for the narrow corners without violating the proportional scale of the entire composition; in a long frieze, whether Doric or Ionic, the task was to supply sufficient numbers of figures to occupy the area required by the size of the building. The first difficulty was at first solved by including snaky monsters coiling away into narrow spaces, or the reclining bodies of either combatants or spectators; the Parthenon, pictorially, used the horizontal cornice as a groundline behind (into?) which figures could sink or rise. Eventually, this problem may have led to the demise of pedimental compositions. The second difficulty resulted in a preference for those battles in which the number of participants was undetermined and arbitrary, like the Kentauro-machy and the Amazonomachy. The Gigantomachy, which could include unspecified numbers of giants but required twelve Olympians, could

not be properly adapted to a continuous band until the scholarly resources of the Pergamon Library came to the rescue; its other known instance, on the north frieze of the Siphnian Treasury, occupied a much shorter space, yet the identification of some of its divine figures is still being debated.<sup>51</sup> This problem often led as well to a meaningless repetition of fossilized pattern-book motifs without true "historical" meaning (the stumbling-horse motif, the hair-pulling scene, the opponent dragged from his/her mount), and, increasingly, to the adoption of the so-called monotonous friezes, in which the same compositional unit could be endlessly repeated like the rolling of a cylinder seal: racing chariots, dancing women, boukrania and garlands, weapons.

One final difficulty for the study of architectural sculpture, albeit specific to this series of lectures, is already adumbrated in my previous statements: what method should be adopted to investigate the subject, since changes seem to occur with time, according to location, to type of building, and by subject?

## Methodology

No single approach can be considered entirely satisfactory. Until now, architectural sculpture has been generally included in handbooks on Greek sculpture as part and parcel of our study of ancient art. A purely chronological development has therefore been followed, giving the impression that no regional preferences and no gaps existed in the diachronic production of the three main forms of architectural embellishmentpediments, metopes, and friezessince their inception. That this



picture is not entirely correct has been shown by Nancy Bookidis, in her analysis of Archaic architectural sculpture, and has since been reinforced by others, and for different periods.<sup>52</sup> It seems clear that not all forms of architectural sculpture began simultaneously, and they did not develop at the same pace, regional preferences influencing not simply the use of specific orders Ionic versus Doric and therefore of specific types of carved decoration, but even their very presence and locations.

In very general terms, it could be stated that *continuous friezes* are among the earliest examples of architectural sculpture preserved, although they did not necessarily occur only on the entablature, but also as part of orthostate courses or on walls, most of them from Asia Minor and the islands. Some terracotta examples may be even earlier than the stone ones, and perhaps diffused first from Crete into Italy.<sup>53</sup> *Carved metopes* probably appeared almost simultaneously, according to some scholars, but it is still debated whether the form originated in the Peloponnesos or in Magna Graecia; they were certainly greatly favored in Sicily and South Italy, from which most of our series come.<sup>54</sup> *Pedimental compositions* were primarily at home on the Greek mainland, and most often connected with the Doric order; Sicily, for all its Doric temples, preferred great gorgoneia in the center of the gables and never quite developed a taste for elaborate figured scenes, although a few were introduced

in the western colonies after 480 B.C.E., under influence from the mother country and the renewed contacts among all Greeks in the aftermath of the Persian and Carthaginian wars. International sanctuaries like Delphi and Olympia were, however, open to all forms of architectural embellishment, in keeping with their "melting pot" status, but still revealing significant patterns of preference according to their geographic orientation.

The Archaic period was one of great experimentation and daring innovations. The Classical phase is thought to have established the norm, although this sense of regularity and uniform diffusion is only apparent. The fifth century was dominated by Athens and its building program, the fourth century by a revival of activity in the Peloponnesos and the Asia Minor cities. The Hellenistic period broke down the patterns once again, not only in geographic, but also in formal terms, with different types of structures receiving sculptural decoration.<sup>55</sup> A purely chronological study would not, therefore, do justice to the variety of solutions adopted in the various areas of the Greek world.

Typological studies have also been attempted. The early work by Demangel (1932) on the Ionic frieze finds a more recent counterpart in the



book by Felten (1984), while Osada (1993) confines his survey to the Hellenistic examples. Kähler's analysis of metopes (1949) is now supplemented by Junker (1993). Only Lapalus' (1947) discussion of pedimental compositions remains at present without update, perhaps a desideratum, since Delivorrias' 1974 treatment concentrates on Attic Classical monuments. Akroteria have also been the subject of monographic inquiry: by Wester (1969), Goldberg (1982), and, more recently, by Danner (1989); figured coffers have been investigated by Tancke (1989). Another form of typology could be pursued according to building forms that, at some point in time, received sculptural decoration: temples first, but also treasuries, tholoi, altars, and eventually tombs, stoas, propyla, theaters. Some authors have indeed treated such subjects in monographic form, but they have concentrated primarily on plans and functions, rather than purely on sculptural decoration.<sup>56</sup>

Geographical patterns can be plotted within specific periods. We have already mentioned the valuable study by Bookidis for the Archaic period, and now Webb (1996) has produced a similar comprehensive work for the Hellenistic cities of Western Anatolia and the Aegean islands. Other such monographs are certainly desirable.

Subjects could be extracted from that enormous reservoir of information that is the *Lexicon Iconographicum Mythologiae Classicae* (*LIMC*), but no special emphasis is there given to architectural sculpture, and only identifiable mythological themes are included. Knell (1990), on the contrary, has focused on our very topic and makes some important general points, but he proceeds by examining sixteen individual buildings (mostly from the sixth and fifth century) and I find myself little convinced by many of his interpretations. Specific aspects of representations have also received attention; for instance, Carroll-Spillecke and Wegener (both 1985) have investigated the use of landscape in relief sculpture, which comprises architectural examples. But, once again, these are only a component of a wider picture.

The present work cannot attempt to be a comprehensive book of Greek architectural sculpture, whether by areas or by periods, and I have dealt with the issues of origins in earlier publications (1966, 1977, 1993). It seems best, therefore, to explore specific aspects of the larger topic within the framework of the traditional questions: why, what, where, how, when, and who. In the present chapter we have explained "why" we should look at architectural sculpture. "What" will address the issue of definition, not simply in terms of the standard forms (pediments, metopes, friezes, akroteria) but of all other carved items on a



building that may carry symbolic function. "Where" will explore the issue of visibility, and therefore, indirectly, of the elements of a program that were meant to be read together. "How" will continue this inquiry by investigating the role of color in increasing visibility or in adding to compositions; the use of various materials will therefore be considered as well. "When" will focus on the changes in meaning of specific topics through the various phases of Greek sculpture, taking into account possible local traditions and political implications. Finally, "who" will attempt to determine the role of the architect vis-à-vis that of the sculptor and of the sponsor, in terms of the all-important decisions of what to represent, in what fashion, and where on the building. Inevitably, a certain amount of overlap among topics will engender some repetition of concepts, but the great variety of extant Greek monuments should prevent monotony. Thus my text might imitate a Greek frieze which through

the repetition of standard motifs ensures understanding and recognition while producing a pleasing effect through slight variations.

## Notes to Chapter 1

1. See, e.g., the statement made by Bradley A. Ault (*AJA* 99 [1995] 752) in reviewing M. Lock, ed., *Meaningful Architecture: Social Interpretations of Buildings* (Aldershot 1994): "In terms of siting, materials, plan, intent, and usage, architecture is encoded with and therefore encapsulates culture. By serving to reinforce and perpetuate a host of social meanings, architecture helps not only to define, but actually create the social framework it embodies." Additional important statements with specific reference to ancient buildings can be found in the various articles edited by Hoepfner and Zimmer 1993.

2. The Eleanor Donnelly Erdman Hall, built in 1965. The plan consists of three diamond-shaped buildings in a row touching and overlapping at one point. The main materials are dark slate framed in (light) precast and poured concrete. Textural contrasts are provided by, among other features, the rough surface of the concrete, which retains the graining of the plywood panels in which it was cast, as well as the slight ridges marking their intersections; the concrete walls are also pierced at intervals by the cylindrical holes that served to bolt together the two faces of the wooden molds. This grainy surface in turn contrasts with glass, polished wood, and shiny copper fixtures. For an account of the criteria involved in the building of Erdman Hall, see Scholz 1965; an interview with Louis I. Kahn is reported in *The Bryn Mawr Alumnae Bulletin* 43 (1962) 25; both issues contain photographs, plans, and descriptions. Throughout my text I shall make reference to buildings and literature

with which I am most familiar, without pretense to complete or most pertinent coverage.

3. Vienna Akademie der Bildenden Künste (built in the 1870s): Muss and Müller-Kaspar 19911992, with catalogue of the (terracotta) replicas of all ancient statues on façade. I know of no written source on the arrangement of statues at Gothenburg, Konstmuseet, but I speak from personal experience, having visited it in 1988. For a detailed analysis of monastic (mediaeval) allusions in buildings of the University of Michigan and other campuses in the eastern U.S., see Forsyth 1993.

4. This reconstruction rests partly on representations on coins and on a relief depiction from the Flavian Tomb of the Haterii: Nash, s.v. Amphitheatrum Flavium, figs. 12 (coin of Titus) and 14 (relief). For another image, on the reverse of a bronze medallion of Gordian III, see Hannestad 1988, 287 fig. 173.

Some Greek monuments, especially tombs and heroa, had free-standing sculptures on their roofs or intercolumniations (e.g., the Belevi Mausoleum, the Halikarnassos Mausoleion) that were part of the original plan and yet could be removed without affecting the structures; but these are unusual buildings, whereas I am referring primarily to temples.

5. The most recently attested example of Greek pedimental sculpture being used on a Roman building is the Amazonomachy placed (by Augustus ?) on the Temple of Apollo Sosianus: La Rocca 1986. Roman pediments have been treated by Hommel 1954; see especially his general comments on pp. 78 and contrast Lattimore 1974. I know of no comprehensive treatment of Roman architectural sculpture per se; even the 1990 book edited by Martin Henig (Henig 1990), despite its title, simply collects a series of independent papers on a variety of topics presented at an Oxford conference in 1987 under a wide umbrella. A symposium held at the Center for Advanced Study in the Visual Arts (CASVA) in Washington, D.C., in January 1993, on "The Interpretation of Architectural Sculpture in Greece and Rome," is again a similar gathering of independent presentations. Among them, only that by Zanker (1997) asks something relating to my present topic, but his analysis concentrates on

Roman Imperial buildings, specifically the Fora and their varied forms of sculptural embellishment, rather than on architectural sculpture in the Greek sense. He does, however, note that depictions of Roman temples on coins give a lessened role to statuary as time progresses, and explains the phenomenon by postulating that "the breadth, expense, and complexity of the decoration in the long run outweighed ideological messages" (p. 182). Moreover, such coins often show temple façades that reveal the cult image (which would have been visible only on festival days), as well as the Emperor sacrificing in front of them; Zanker therefore concludes (p. 183) that "for the contemporary observer, the architecture and its decor were placed in the context of sacrifice, prayers, and imperial appearances." This religious outlook seems not too far from what we envision to have obtained during Greek times, although the specific sculptural embellishment may have been less meaningful.

For a discussion of *spolia* as a relatively modern term (originating around the time of Vasari), see Kinney 1995; she focuses on the Arch of Constantine as a typical example.

6. Pliny *NH* 36.38; and cf. Isager 1991, 178 n. 167, although something is missing from his translation. That Pliny is here not speaking about relief sculpture is made obvious by the context, as well as by the fact that the author virtually ignores reliefs in his account. For the use of terracotta figures on the *fastigia* (ridgepoles) of temples, see also *NH* 35.158, and cf. 36.6. I am not considering here the use of historical reliefs on triumphal arches, since the main purpose of such structures was no other than to carry the political message intended by both relief and free-standing sculpture; they therefore had virtually no independent function aside from their commemorative role. For a continuous frieze with narrative content, see, e.g., that of the Basilica Aemilia, and a recent interpretation by Albertson 1990.

7. Not all statuary with an unfinished side can be said *a priori* to have been architectural, since some free-standing sculptures were made with foreknowledge of their intended setting, especially during the Hellenistic period. On the other hand, all three-dimensional architectural statues (pedimental, akroterial) are likely to be less well finished in some of their parts.

8. Karnak, Temple of Amun, Hypostyle Hall built by Sethos I and Ramesses II: Lange and Hirmer 1957, pls. 22729, section in fig. 32 on p. 347, comments on p. 348.

9. See, e.g., Borchardt 1897, esp. 53 and 58; also Finnestad 1985. For the general conception, as well as for helpful references, I am indebted to Dr. J. Kamrin. For a poetic comparison between Greek and Egyptian columns, including Hathor capitals (although with inferences about the Greek peristyle with which I cannot agree), see also Ginouvès 1989, esp. pp. 1415. To be sure, temples like the Ephesian Artemision had their own "forest of columns" unnecessary in terms of structural needs and disproportionate in comparison to man, but they were obviously influenced by non-Greek prototypes, whereas I focus here on the standard Greek temple.

10. See, e.g., the Tomb of Ramose: Lange and Hirmer 1957, pl. 164. On the various types of relief, see, e.g., the very comprehensive treatment by Rogers 1974. The issue of frames, albeit exclusively in Greek art, has been considered by Hurwit 1977. For the "Law of the frame" in Romanesque sculpture, as conceived by H. Focillon in 1931, see the comments by Hearn 1981, 14 and 27. Some wall friezes existed also in Greece, perhaps in imitation of Egyptian practices, but they were rare: see *infra*, ch. 2.

11. Great Court of Ramesses II at Luxor: Lange and Hirmer 1957, pls. 23940; see also pls. 23435 for the second court of the Ramesseum.

12. See, e.g., Werbrouck 1949, 11933, pls. 4243; von Mercklin 1962, no. 2 figs. 89, and cf. his figs. 126 for other examples.

13. Temple of Ramesses II at Abu Simbel: Lange and Hirmer 1957, pl. 244.

14. See, e.g., Frankfort 1970, 15694, esp. 157 and fig. 186. Although commonly stated to be in alabaster, Assyrian orthostates are rather made from a form of anhydrite (Mosul marble): Reade 1979.
15. See, e.g., Frankfort 1970, 36374, figs. 43536, 439, and cf. fig. 416. For the symbolism of Persian sculpture, see Root 1979.
16. See, e.g., Holliday 1993, especially Holliday's Introduction, pp. 313, with further references on p. 4; but cf. also my review of it, Ridgway 1995b.

With emphasis on the Telephos frieze: Stewart 1996. For earlier, but useful, bibliography, see Ridgway 1993, 411n. 9.32

17. For extensive discussion of Greek Archaic sculpture, including the issues involving kouroi and korai, see, e.g., Ridgway 1993: the Moschophoros is fig. 34, the Olive Tree Pediment is fig. 119, the Introduction Pediment is fig. 117.
18. The Vitruvian explanation (*De Architectura* 4.2.6) of the Doric frieze as translation from a wooden prototype has now been thoroughly discredited: see, e.g., Klein 1991, with additional bibliography. The symbolic meaning of such features, advocated, e.g., by Hersey 1988, will be discussed in ch. 2; see also ch. 6 for architectural/aesthetic arguments.

19. On Romanesque and Gothic architectural sculpture, see, e.g., Hearn 1981, esp. chs. 45; and Katzenellenbogen 1959, on the sculptures of Chartres Cathedral (145123 5). For a technical discussion of some of the reliefs in the latter, see, e.g., Rogers 1974, 16970.

20. For this theory, see Ridgway 1991. The story of Phrixos appears on the so-called Sikyonian metopes at Delphi, but I am convinced that they belonged to a Magna Graecian treasury before being reused within the foundations of the later Sikyonian structure: see Ridgway 1993, 33943, and esp. 36162, n. 8.15, for further arguments and bibliography; also *infra*, ch. 6. I use the Magna Graecian denomination in its inclusive sense comprising both Sicily and South Italy.

21. See, e.g., *LIMC* 6, s.v. Kerkopes, pp. 3235 (S. Woodford); cf. no. 9, pl. 17, for a Lucanian RF pelike in the J. Paul Getty Museum (ca. 380) that has become known only recently.

22. For the recounting of epic stories in textiles, see Barber 1992, and cf. also, in more general terms, Barber 1994. The topic of ancient literacy is currently much debated, and an anonymous reader refers me to Harris 1989 for a more sceptical position. See, however, Harris' conclusions on p. 64; his list of ancient purposes for writing (pp. 2627) is helpful in pointing out "usefulness to the writer and to the reader" as the primary criterion for the exercise. That at least the Athenians probably read more extensively than currently surmised will be argued by James Sickinger in his monograph in preparation; I thank Prof. Sickinger for discussing this issue with me.

23. Zeitlin 1994, especially 139; see also p. 144: "art is shown as a source of information, a mode of learning, whether of ordinary matters or of weightier cultural traditions . . . . Cognitive effects . . . cannot be separated from the environment of the polis that promoted such aesthetic productivity and which, in its monumental art and building programmes for the adornment of the city, also educated its citizens through recordings of mythic traditions into visual narrative and form." She is referring primarily to the 5th c. B.C.E., but her statements can apply also to earlier (and later) periods. Compare Hearn 1981, final comments on p. 223 (on Gothic sculpture): "Although its development was pursued as a virtual rather than an actual imitation of nature, the role of sculpture was to create images that reflect in the mirror of the physical world the higher truths of the spiritual world."

See also Connelly 1996, 5455 and n. 10, referring to forthcoming publications on Greek images and emphasizing their "central role as vehicles that enable us to see what is *no longer visible*, as *mnemata*, or memorials for what once

was" (author's italics). Connelly's entire article is relevant to the issue of interaction between polis and religion/mythology, and its expression in the theater and the arts.

24. Zeitlin 1994 discusses the *Ion* on pp. 14756, not simply Euripides' description of the architectural sculpture, but also that of the tent set up by Ion, choosing it among the textiles kept in the temple (on which see also Barber 1992). Her primary intent is to correlate visual modes, both those expressed by the playwrights and those of the spectators to the plays or to the monumental arts. Her explanation for the transposition of the west-pediment Gigantomachy to the east façade links the myth to further developments in the play, although she acknowledges the difficulty of the text (note v. 189 mentioning twin façades:

*διδύμων προσώπων*, and cf. her n. 32 on p. 297). She is correct in stating (p. 297 n. 28) that the story of Bellerophon and the Chimaira (vv. 201204) is so far not attested at Delphi in architectural sculpture, even in akroterial form, yet Euripides may have had a recent, spectacular example in mind: the temple of Athena Nike on the Athenian Akropolis had in fact a gilded-bronze

group of the hero on Pegasos as its central ornament (Boulter 1969). Other akroterial depictions of the myth are known from vase painting (albeit without the Chimaira: *LIMC* 7, s.v. *Pegasos*, no. 240 pl. 170 = Boulter, pl. 37a) and, in stone, from the 4th-c. B.C.E. Heroon of Perikle in Lykian Limyra that imitates Athenian structures (Borchhardt 1990, 75 fig. 32, and 171 no. 58; Ridgway 1997, 9499). At a lecture at Bryn Mawr College on Feb. 2, 1996, Kevin Lee stated that the *Ion* is to be dated ca. 413 on metrical grounds. By that time, the Nike Temple on the Akropolis had been completed. Perhaps Euripides meant to allude to an architectural feature of the Athenian Akropolis well known to his audience, albeit transposing it to Delphi for his own purposes, possibly for familiarity and recognition or, as Prof. Lee stressed, for that intentional sense of bilocation (Delphi/Athens) that Euripides gave to his verses in this tragedy.

The point that the playwright deliberately transposed the subject of the west gable to the east was already made by Koster 1976, who gives a detailed analysis of the extant stone fragments, includes previous opinions, suggests that the other myths cited by the chorus were represented on the (now missing) metopes, and attributes the pedimental shift to Euripides' desire to mention familiar subjects. I agree with this last point, but would stress the specific relevance for Athenian women of the Gigantomachy, which was woven on the Panathenaic peplos for Athena. One more opinion (Roux 1984, esp. 67) assumes that Euripides is not alluding to the Alkmeonid phase of the temple familiar to his audience. The playwright would be referring instead to the preceding structure approximately contemporary with Kreousa, and basically describing the decorated metopes and pediment of a traditional temple

("une banale façade de temple dorique," p. 7), probably as shown on the stage at the moment of the performance. He however interprets *διδύμων προσώπων* as denoting (anachronistically) the two herms standing near the temple door and carrying the famous maxims.

25. Literally, their weavings

*ἔμαισι . . . παρὰ πήναις*

26. Freedberg 1989; the quotations are from p. 438. See also pp. 42930, for his criticism of modern approaches: "The obstacle is our reluctance to rein-

state emotion as a part of cognition . . ." Although Freedberg tends to focus on later periods than the one here under investigation, and on painting and sculpture in the round rather than on relief and architectural sculpture, his comments seem to me particularly apt for my topic. As an example of the perceived power of a (painted) portal in an Abbey of Our Lady, however, see his p. 307.

27. I have stated "almost always" instead of "always," because we now know that the entire sculptured frieze of the Temple of Dionysos at Teos was reset and perhaps largely recarved in Roman times: Uz 1990. We also know that repairs were carried out on the Parthenon sculptures, perhaps during the Antonine period (see Palagia 1993b, 3 and Index, p. 74, s.v. repairs), and that some figures of the Erechtheion frieze and one of the Karyatids were replaced in Roman times (frieze: Boulter 1970, 1819, pl. 30, figs. 1720; Karyatid: Lauter 1976, 2931, pls. 5256, figs. 1518). That architectural sculpture could even be copied is suggested by a slab from the Ilissos Temple frieze that has a Roman replica from Ephesos, now in Vienna, on which see, most recently, Krumme 1993, esp. 21419 and figs. 23. Numerous adaptations of the Nike Balustrade also exist.

28. By historical connections I mean, for instance, a monument that has been erected to celebrate a victory, and can therefore be dated shortly after the event (e.g., the Nike set up at Olympia to commemorate the Battle of Sphakteria, 425 B.C.E.). External circumstances could be, for example, an Olympic or Panathenaic victory that prompted the erection of a monument. Inscriptional evidence, especially at Athens, may mention an archon's name, thus providing a specific calendar year. Finally, a signed base, if safely connected to the sculpture, would at least yield the general chronological indication of the sculptor's life span, as we know it through Pliny and other sources.

29. A typical example is provided by the Lakonian disk akroteria that occur on early (Archaic) buildings at Olympia: see Kästner 1990, esp. List B. Terracotta roofs with distinctive antefixes have also confirmed the presence of Magna Graecian structures at that sanctuary: see Heiden 1995.

30. For the specific viewpoints of the philosophers about the arts, see Pollitt 1974, 3158, esp. 4149 (Plato), 4950 (Aristotle), and contrast the sophistic position that approves of "deception," pp. 5052, 5859 (Gorgias of Leontinoi, a Magna Graecian). For discussion of the concept of *mimesis* in both poetry and the visual arts, see pp. 3741. Plato *Rep.* 3.401b, specifically warns against craftsmen whose possible "bad" influence could be gradually absorbed without conscious perception and was thus uncontrollable; I owe this reference to F Cope. An anonymous reader suggests also that Aristotle should not be grouped with Sokrates and Plato, since he considered imitation a valuable and necessary means to learning.

31 See, e.g., Euripides' *Hypsipyle* Fr. 764 N2 (G. W. Bond, ed., *Euripides. Hypsipyle* [Oxford 1963] 1011), for two characters (probably Hypsipyle's sons, with Thoas speaking) who seem to be viewing the façade of the palace at Ne-

meatherefore an imaginary structure by the playwright's timeand describe the struggling maidens and the reliefs in the pediment:

ἰδού, πρὸς αἴθέρ

ἔξαμιλλησαι κόρας / γραπτούς <τ' ἐν αἰετῷ> οῖσι προσβλέψον τύπους.

In the *Kyklopes* by the same author (vv. 290295) Odysseus mentions to Polyphemos several temples of Poseidon (at Tainaron, Cape Maleas, Sounion,

Geraistos), but without reference to architectural sculpture. Aischylos, in his satyr play *Theoroi* or *Isthmiastai* (P.Oxy. 2162, frg. 78a Radt) has a chorus of satyrs talking about hanging their images on the temple of Poseidon at Isthmia; they are usually thought to refer to votive, painted plaques, but could possibly allude to antefixes of the kind known from Thermon and common in Sicily (see infra, ch. 2 and n. 66).

For Euripides' interest in topography and buildings, see Connelly 1996, 72, and especially 80 with ns. 17374, with reference to other possible artistic allusions by the playwright.

32. That the term ekphrasis applied to works of art may be a late convention is mentioned by Pollitt 1974, 87 n. 2. In Hellenistic and early Imperial times, the word may have meant description of historical events. For the fictional content of such works, see also Hebert 1989, 27071.

One more poet, the Roman Naevius, may have cited the sculptural decoration of the 5th-c. Olympieion at Akragas, but the mention is uncertain: see *infra*, ch. 5 n. 13. Diod. Sic. (late 1st c. B.C.E.) 13.82.14, describes an Ilioupersis on the same building, and mentions a Gigantomachy there on the east side: cf. De Waele 1982; Ridgway 1981, 41 and n. 5.

33. Mimiambos by Herondas: Hebert 1989, 4849, Q(uellen)10710; for its locale, see Cunningham 1966, esp. 11517; for a discussion of the Koan altar, see, e.g., Ridgway 1990, 163, with additional references in notes. The stylop-inakia (which some would place on the columns, whereas others visualize them elsewhere: see Moreno 1994, 56970 and fig. 74 ; Webb 1996, 17 and ns. 47) supposedly exemplified children's love toward parents, especially mothers, in keeping with Eumenes II and Attalos II's devotion to their mother Apollonis which dates the temple ca. 200/150 B.C.E.; for a literal interpretation and reconstruction, see, e.g., Stupperich 1990 (who supports a date between 175/4 and 159). See however "Bulletin analytique d'architecture du monde grec," *RA* 1994, 367 no. 117, where it is stated that, in a discussion at the 14th International Congress of Classical Archaeology, held in Tarragona 511 Sept. 1993, T. Lehmann argued for the exclusively literary character of the de-

scriptions. To my knowledge, his comments were not printed in the Acts of the Congress, *La ciutat en el mon romà* (Tarragona 1994); I thank Dr. Jochen Twele for much bibliographical help in searching for this reference. Hebert 1989, 272, who gives the epigrams on the Kyzikos stylopinakia as his entry Q 192211 on pp. 8789, calls them one of the very few mentions of Hellenistic architectural sculpture on sacred buildings.

One more instance can be cited, although it allegedly involves a Punic, not a Greek temple. Prof. Charles E. Murgia has called to my attention the passage in the *Aeneid* (I.453493) in which Virgil describes Aeneas weeping at the sight of the depiction of the Trojan War, its various episodes shown "in order" on the walls of the Temple of Juno in Carthage. The poet does not specify whether the representation was painted or in relief, although he uses color-oriented words (Memnon is dark, Penthesileia has a golden strap). In v. 464 he uses the term "pictura" which could, however, apply to both an actual painting and a painted relief, or even to embroideries; yet it is unlikely that costly hangings would be

displayed on the outside of a building, exposed to the weather. Although the description is anachronistic and improbable, an object of poetic fantasy, perhaps Virgil had in mind something comparable to the Parthenon north metopes; certainly he was confident that his audience could visualize what he was referring to, even if it had no grounding in reality.

34. On Vitruvius as an art critic, see, e.g., Pollitt 1974, 6670, esp. p. 68 for Vitruvius' expression of Roman concepts, despite his admiration for, and use of, Greek sources.

35. Note the terms used (my emphasis): "statuas marmoreas muliebres *stolatas*, quae cariatides dicuntur . . . nec sunt passi *stolas* neque ornatus matronales deponere, uti non una *triumpho* ducerentur."

36. My comments on Strabo are derived primarily from Lasserre 1969 and 1978. In the earlier volume, Lasserre himself discusses matters of chronology (p. xxxi), travels and sources (pp. xxxivxl). In the later volume, comprising the text of Book 8 on the Peloponnesos but considering the Greek trilogy as a whole, the introductory comments are by Raoul Baladié, who specifies the possible chronology of the Greek books (pp. 56), reviews the "role of autopsy" (pp. 1519), and Strabo's literary sources (pp. 1932).

37. Strabo 9.1.16, on Athens: "The city itself is a rock situated in a plain and surrounded by dwellings. On the rock is the sacred precinct of Athena, comprising both the old temple of Athena Polias, in which is the lamp that is never quenched, and the Parthenon built by Ictinus, in which is the work in ivory [sic] by Pheidias, the Athena. However, if I once began to describe the multitude of things in this city that are lauded and proclaimed far and wide, I fear that I should go too far and that my work would depart from the purpose I have in view." (Loeb ed. 1927, trans. H. L. Jones). Note that the Parthenos was chryselephantine, not just in ivory, as stated.

The mention of Rhamnous (9.1.17) occurs within an enumeration of Attic demes cited because of their mythical and historical associations, e.g., Marathon because of the Persian battle, Aphidna because of the rape of Helen by Theseus and its aftermath: "Rhamnus has the statue of Nemesis, which by some is called the work of Diodotus and by others of Agoracritus the Parian, a work which both in grandeur and in beauty is a great success and rivals the works of Pheidias . . ." (same edition and trans.). Note that Strabo is not concerned with ascertaining the authorship of the Nemesis, which was in fact by Agorakritos (Diodotos is, to us, not otherwise known). We may here add a comment on the frequent contradictions and artistic misattributions of the ancient sources, which recent work on memory elucidates by explaining the principles of note-taking and the

standards of accuracy in ancient authors:  
Small and Tatum 1995, esp. 15966.

On Strabo's *Historika Chresima*, see his own statement, 1.1.2223; this work is now entirely lost.

38. See Isager 1991, which is the main source for many of my own statements. Pliny's work was dedicated to the emperor Titus, and a basic theme of the author was the comparison and contrast between Neronian and Flavian practices, with little impartiality. Another leitmotif was his moralistic praise of

simpler Roman customs before *luxuria* set in, and therefore a biased appreciation of "earlier" (Republican) practices as contrasted with those of his contemporaries. Admiration of Greek artistic achievements is consistently counterbalanced by pride in Roman civic works and interests.

39. Relief as being outside accepted artistic categories: Isager 1991 , pp. 119, and 167. For the decoration of earlier temples, like the Agrippan Pantheon, see *supra*, n. 6. For the Temple of Apollo Sosianus and its sculpture, see *supra*, n. 5, and Pliny *NH* 36.28 (cf. Isager 1991, p. 163); the Dying Niobids are mentioned because of the uncertainty about their authorship, whether by Skopas or by Praxiteles. Note that in discussing the decoration of the two temples within the Porticus of Octavia, and the peculiar transposition of female subject matter to the Temple of Jupiter rather than to that of Juno, Pliny cites *painted* embellishment, as well as *signa* that were allegedly taken by porters to the wrong destination: *NH* 36.4243. This statement implies that the embellishment Pliny has in mind is portable and threedimensional, rather than architectural. In the same passage he does mention the carved lizard and frog on the bases of the columns, but because he relates the anecdote that they are picto-

graphs of the architects' names (Sauras and Batrachus) who were not allowed to sign their work (cf. Isager 1991, 162).

40. My comments on Pausanias are mostly derived from Habicht 1985. For the statement that Pausanias' world was Roman, see p. 119; for the taste of the Antonine period, see pp. 12630; for Pausanias' own taste in architecture and literature, pp. 13234. Habicht notes (p. 134) that the over 120 authors named by Pausanias include no contemporary Greek, and no Latin writer of any period. The 4th-c. and Hellenistic art works (of any kind) mentioned by Pausanias are listed by Hebert 1989, 197232, Q 376-465. See also Arafat 1996, 3642.

41. The quotation is from Levi 1971, vol. I, 69 n. 142. In future references to Pausanias' text, the numbers within square brackets are those given by Levi, which often differ from those of standard commentaries.

42. I am referring primarily to Roman friezes on temple entablatures, not to such continuous sculptured bands as the windings of the Column of Trajan, or even the Great Trajanic Frieze presumably from the Imperial Forum. Triumphal arches, above the columns and below the attic, carried a figured frieze that was however so much smaller in scale than the other sculptural decoration, and so static and formulaic in depicting the triumphal and sacrificial procession, that it has often been classed as "popular" (versus official) art.

43. With regard to the Nike shrine, Pausanias (1.22.5) says only that the sea is visible from there, and that Aigeus leapt to his death from that lookout. The ancient statue of (Athena) Nike Apteros is mentioned during his treatment of Lakonia: 3.1 5.7. For the statement that Pausanias still had to describe the whole of Greece, see 1.26.4.

44. Pausanias, on masters of Olympia pediments: 5.10.8; of Delphi pediments: 10.19.4131. For Pausanias' great admiration for Pheidias, whom he ranked above all other sculptors, see Habicht 1985, 131.

Pausanias' attribution of the west gable of the Temple of Zeus to Alkamenes has been defended by Barron 1984, who postulates the existence of two sculp-

tors by the same name, the elder of the two working at Olympia; but it seems certain that Pausanias meant the Alkamenes pupil of Pheidias. At any rate, Paionios' style cannot be reconciled with the style of the east gable, so that both Pausanias' attributions appear erroneous. Since Paionios made the akroteria for the temple, in this instance confusion (either by the Periegete or by his guides) may have arisen between the pedimental sculpture and the gilded Nike and tripods that crowned the roof. For the entire description of the Temple of Zeus, see Pausanias 5.10.210.

At Delphi, Habicht 1985, 135, notes that Pausanias mentions nothing later than 260 B.C.E., except for the third temple in the Sanctuary of Athena Pronaia and several statues of emperors. Yet he also omits to describe the ca. 400 B.C.E. tholos in the same sanctuary building that in the elaboration of its sculptural ornaments and the richness of its materials rivaled the Athenian Parthenon. On Pausanias' surprising haste in visiting and describing Delphi, see Heer 1979, 28095.

45. The relevant Greek text reads:

ὑπὲρ μὲν τοῦ ναοῦ πεποίηται τῶν θυρῶν . . . ὑπὲρ δὲ τοῦ ὄπισθοδόμου τῶν θυρῶν

. . . Theoretically, Pausanias could be referring to doors of grilles between the columns of both the pronaos and the opisthodomos; or a door in the crosswall could have been opened by his time, to allow a rear view of the seated Zeus. But both suppositions cannot now be verified and seem unlikely.

46. For discussion of this issue, see Ridgway 1997, 2627 and n. 7. For the latest architectural evidence, see Pfaff 1992, esp. 14953, 23538 (metopes) and 17576 (pediments). Note that, at the Argive Heraion, Pausanias does not use his traditional formula to refer to pedimental sculpture, and therefore his description is not picked up by the Ibycus program, on which see next note.

47. For Pausanias' interest in architecture, see Heer 1979, 10812, and contrast her comments on his interest in sculpture: 11619. Besides the Parthenon, the Temple of Zeus at Olympia, the Temple of Apollo at Delphi, and the Argive Heraion (all mentioned in my text), additional contexts revealed by the Ibucus program are: the Asklepieion at Titane, with Herakles between two Nikai (2. 11.8), the Temple of Apollo at Aigina, with no mention of subject matter (7.26.6[3]), the Athenaion at Tegea, with detailed description (8.45.67), and the Herakleion at Thebes, with a representation of several of the hero's labors (10.19.41[3]). I am indebted to Prof. Richard Hamilton for the Ibucus search. Note that the temple at Tegea included decorated metopes over the porches, with at least some of the same characters that Pausanias mentions for the gables; yet he does not cite them, despite his interest in relating the local legends. The Apollo sanctuary on Aigina has yielded some late Ar-

chaic pedimental sculptures, but too fragmentary for a safe reconstruction of composition and theme: cf. Ridgway 1993, 29697 and bibliography in n. 7.41 on p. 323.

Pausanias makes two mentions of reliefs (*τύποι*), at Lykosoura specifying that they were in white stone, but both occur in uncertain architectural contexts: two reliefs are described as flanking the entrance to the *hieron* of the Great Goddesses at Megalopolis and depict Artemis, and Asklepios and Hygieia respectively (Paus. 8.31.1 = Hebert 1989, Q 448); four reliefs are "on the

walls" of the stoa to the right of the Temple of Despoina at Lykosoura and depict: the Moirai and Zeus Moiragetes; Herakles taking Apollo's Tripod; the Nymphs and Pan; Polybios son of Lykortas (Paus. 8.37.12 = Hebert 1989, Q 450). Such panels may be votive, rather than architectural.

48. For the Epidaurian accounts, see Burford 1969, and Yalouris 1992, esp. 6869. See also ch. 6, for a fuller discussion.

49. Tegea sculptures: Stewart 1977; and cf. Ridgway 1997, 4852. Parthenon pedimental figures: Palagia 1993b, e.g., pls. 28, 33, 43, 6869, 72, 77, 82. Olympia pediments: Treu 1897, 4494, and, e.g., figs. 55, 67, 71, 7374, 80, 82 (east pediment), 116, 121, 134, 150 (west pediment). P. Rehak and J. G. Younger are preparing a monograph on repairs to the Olympia sculptures; in the meantime, see the Abstracts of their papers presented at the Annual Meetings of the Archaeological Institute of America: *AJA* 98 (1994) 33334 (east pediment); *AJA* 99 (1995) 309 (west pediment); *AJA* 100 (1996) 36768 (metopes).

50. Maussolleion frieze: Cook 1989, 36, with tabulation of the different attributions from 1882 to 1965; see also his comments on p. 40 for the disproportionate importance attributed to the Amazonomachy slabs because of the accident of preservation. On the masters of the Maussolleion, see also Ridgway 1997, 12023, 251. A monograph on the Amazonomachy frieze, by B. Cook, is forthcoming.

To be sure, a new reconstruction of the Maussolleion (Hoepfner 1996b) greatly reduces the number of statues in the round postulated for the building, while also changing the location of two friezes, but my point remains valid, I believe.

51. For a recent reference to this issue, see M. B. Moore's review of Brinkmann 1994, in *AJA* 100 (1996) 186.

52. Bookidis 1967. See also, for the Archaic period, Ridgway 1993, 273331 (pediments and akroteria), 33375 (metopes), 377415 (friezes), and, for the Hellenistic, Webb 1996.
53. See Merten-Horns 1992.
54. For a Peloponnesian origin, see Barletta 1990, esp. 6467. The origin of the painted metopal plaque in northwestern Greece has been somewhat undermined by the realization that the Temple of Apollo at Thermon, thought to be of 7th-c. date, may instead belong to the early Hellenistic period (Papapostolou 1993); but the existence of an Archaic phase has now been clarified by Kuhn 1993. For a Magna Graecian origin of carved metopes, see Ridgway 1993 (*supra*, n. 52), but cf. Junker 1993, 11824 (both Thermon and Kalydon), in support of Archaic use.

55. have dealt with architectural sculpture in all my books on Greek sculpture so far; besides the Archaic references (*supra*, n. 52), see also: Ridgway 1970, 1228 (Severe period, ca. 480/450); Ridgway 1981, 1639 (metopes), 4072 (pediments and akroteria), 73103 (friezes); Ridgway 1990, 1530 (late 4th c.), 14999 (3rd c.). For the 4th c., see Ridgway 1997, chs. 24. The last two centuries of the Hellenistic period will be treated in future monographs.

56. Some examples (in some cases, study of a specific monument includes comments on the entire type): temples: Schmitt 1992; treasuries: Rups 1986;

tholoi: Seiler 1986; altars: Yavis 1949, Rupp 1974, Stampolidis 1987; tombs: Fedak 1990; stoas: Coulton 1976; propyla: Carpenter 1970, Frazer 1990; theaters: De Bernardi Ferrero 19661974. Sturgeon 1977, esp. 4548, briefly surveys decorated theaters of the Greek period. Webb 1996 treats monuments by type (ch. 2) and by subjects (ch. 4), and focuses exclusively on architectural sculpture, but respects geographic and chronological limits.

## Chapter 2

### What:

### The Issue of Definition

In the previous chapter, we attempted a preliminary definition of Greek architectural sculpture: whatever carving was an intrinsic part of each building, so that it could not be removed without physically affecting the structure or without seriously weakening its own aesthetic value and content. But only three or, at most, four major classes of sculptural embellishment come readily to mind in discussing Greek architectural forms: carved metopes, friezes, pediments, and, albeit more rarely, akroteria.

If, however, the above definition is expanded to encompass whatever carving encodes a message or carries a specific meaning within its building other words, not simply what is narrative, but also what may be symbolic then the repertoire of forms increases considerably. We tend not to think in these more inclusive terms for several reasons: the intended message may be incomprehensible to our modern minds; the initial meaning may have been lost and fossilized through time, so that even the Hellenistic Greeks might not have understood what the early Archaic artist had meant to convey; finally, and most likely, the remains are so scant that we can no longer reconstruct the original appearance of the complete structure. It is therefore necessary, albeit somewhat unorthodox, to turn to an example of ancient architecture that belongs to a different class but functions as a virtual temple model: the Alexander Sarcophagus (fig. 1).

Neither its findspot nor its purpose connects it with Greek architecture, since this spectacular casket, almost two meters high, was uncov-

ered in the Royal Nekropolis at Sidon, in north Syria, where it probably served as the tomb for Abdalonymos, a local ruler who died ca. 311 B.C.E. Yet the style of its carvings, the subjects of its narrative scenes, and the syntax of its decoration undoubtedly connect the sarcophagus with Greek work and inspiration, if not directly with Greek workmen, as some would have it. In addition, the abundant traces of color still preserved at the time of its discovery give us some idea of the dramatic polychromy of ancient sculpture and architecture, usually lost to us from more exposed monuments. The Alexander Sarcophagus is both well published and well known, yet we may profitably analyze here its *architectural* features, for the sake of our expanded definition. 1

Although no columns encircle the box, its overall appearance is that of an Ionic temple, as primarily suggested by the dentil course under the eaves of the roof. The long and the short sides in high relief could therefore correspond to a continuous frieze, albeit articulated into two themes: the battle and the hunt. The pediments carry figured decoration, and four recumbent lions at the corners of the lid serve as akroteria. So far, the syntax is comparable to what we traditionally expect from an (Attic) Ionic structure; but other details go beyond it. Of significance are the horned lion-griffin heads that serve as water-spouts along the sides of the casket, alternating with human-head antefixes wearing a leafy crown. The same heads, in janiform arrangement, reappear along the ridgepole, interspaced with eagles, while the griffins full-bodied, rampant, and heraldic recur as central akroteria flanking a "tree-of-life" symbol, thus ensuring the meaningful interlocking of primary and "sec-

ondary" decoration. Finally, below the dentils, a continuous band is decorated with vine leaves in very low relief, their lobations emphasized by drill holes that create a plastic play of light and shadow added to the painted details.<sup>2</sup> Should this floral ornament wreathing the casket be seen as the true frieze of the temple, of the so-called "monotonous" type that becomes current in the Hellenistic period, then the narrative scenes of the sides could be considered the equivalent of the large-scale figures in the round that stood on the stepped platform of the Maussolleion at Halikarnassos, or an anticipation of the Gigantomachy podium of the Pergamon "Altar" (cf. fig. 12), itself probably a heroon rather than an altar.<sup>3</sup>

The primary decoration extols the typical virtues of the eastern ruler his bravery in both war and its peace-time equivalent, the hunt (fig. 2). The scenes are here made distinctive and historical by the inclusion of Alexander the Great (which provides the misnomer for the sarcophagus), yet I

am convinced that they refer to no specific event, and rather combine the *topoi* perpetuated by pattern-books and poetry to characterize both subjects: for the hunt the attack by a ferocious animal, the lesser beasts as victims, the axe-swinging hunter, the dogs and horses; for the battle the stumbling horse, the charging rider, the dead and wounded.<sup>4</sup> To be sure, heroic overtones are implicit in both themes, and even mythological allusions, such as the Meleager Hunt; but the basic content is standard fare for a monarch, especially one within the Persian sphere of influence, as clearly exemplified by earlier, albeit Lykian, sarcophagi.<sup>5</sup>

It is the secondary decoration, however, that requires explanation. Was it mere embellishment and fossilized architectural conventions or did it carry a definite message? Is the floral frieze simply a "glorified molding" or does it have symbolic significance? The specific meaning of each element may be debated, but in general terms their statement is intelligible. The horned, lion-headed griffins, besides being a Persian Imperial form (an allusion to the owner of the casket), are legendary guardians of gold, and, by extension, of anything valuable, like a tomb. By the Hellenistic period, they are traditionally associated with both Apollo and Dionysos; here, given the presence of the vine wreath, the second god may be the more likely patron, his power symbolic of resurrection and eternal life. This same message is conveyed by the vegetal pattern of the frieze and the central akroteria. The foliate heads, both in their single and their double form, have been variously interpreted: as representa-

tions of the Syrian goddess Atargatis, of sirens, of the goddess Isis,<sup>6</sup> this last an Egyptian feature quite compatible with the mixed culture of the Phoenicians, and in keeping with other examples attested within the Royal nekropolis. Whatever their identity, they are clearly heroic/divine signifiers and allusion to immortality, while the eagles with widespread wings are symbols of Zeus and therefore of regal status and power, identifying the rank of the deceased. Abdalonymos' sarcophagus, to give it its proper name, was carefully planned well in advance of his owner's death, with a definite iconographic program to which each architectural element contributed its share.

## Greek Architecture

This is all very well for a Phoenician sarcophagus intended for a king, and therefore made as elaborate as possible, during a time of increasingly mixed influences in the aftermath of Alexander's campaigns. But would such meanings have accrued to "pure" Greek architectural fea-

tures? What else, beyond narrative sculpture, would have carried a message in an Archaic or Classical temple? The answer to these questions may range from "very little" to "just about everything," depending on the point of view.

In 1988 George Hersey published a book on the lost meaning of Classical architecture that attributed symbolic value to every feature of an ancient building, and viewed the entire Greek temple as an assemblage of the materials, including food, used in sacrifice.<sup>7</sup> He asserts that, for the Greeks, ornament was not a form of embellishment, but had to do with armament; that, as

the word *kόσμος* (*κόσμος*) meant not simply decoration but also equipment, it could thus refer to the shields taken from the enemy and hung on temple entablatures. Along the same lines, through an examination of Greek and Graeco-Roman architectural vocabulary (primarily derived from Vitruvius), Hersey sees each term as a verbal pun for the original form that had provided inspiration for the feature, and which was alluded to in its decoration. Thus, spiky leaves painted on the echinos of a Doric capital would recall the spikes of a sea urchin from which the member was named, whereas

floral capitals atop columns would suggest sacred trees. In turn, he believes, Karyatids and Telamones evolved out of real-life prisoners tied to wooden pillars. Tympanum, the word for pediment, refers also to a musical instrument made from animal hides, and therefore the gable itself would go back to a structure of bones covered

with animal skins; triglyphs ( $\mu \eta \rho \circ s$ , meros-meroi) would be sacrificial thigh-bones split in three, and guttae would represent the drops of fat dripping from them. Even the popular egg-and-dart molding (ill. 3B) (although this is a modern label)<sup>8</sup> could be given a literal interpretation, as chicken talons grasping a real egg. In brief, for Hersey, all architectural decoration was meaningful and, given the code, could be read like a written text.

Hersey is a former student of Vincent Scully, whose book *The Earth, The Temple, and The Gods* created quite a sensation when it first appeared in 1962. His theory is that temples were "themselves an image, in the landscape, of his [the god's] qualities"; he therefore focuses on the feminine or masculine traits of each sacred building, in the hope that a determination of its nature may help assign it to the proper deity to which the structure was originally dedicated. More than on the language of architectural forms, however, Scully's analysis relies on the setting of the structure, whether its orientation aligns it with a peak (= male deity) or a cleft (= female deity). Sensitive and perceptive, this book leaves me unconvinced, however, since the typical landscape of

Greece is an alternation of peaks and valleys that could hardly have been avoided in the siting of a temple.<sup>9</sup>

Yet the distinction between masculine and feminine architectural forms ultimately goes back to Vitruvius (1.2.5). He considers the Doric order appropriate to Minerva, Mars, and Hercules; the Corinthian suitable for temples of Venus, Flora, Proserpina, Spring-Water, and the Nymphs, "because these are delicate divinities and so its rather slender outlines, its flowers, leaves, and ornamental volutes will lend propriety where it is due" (trans. Morgan, p. 15). The Ionic order, in turn, should be used for Juno, Diana, Father Bacchus, and similar gods in "the middle position," because it combines the severity of the Doric and the delicacy of the Corinthian. Vitruvius (4.1.6-8) compares the sturdy Doric column resting directly on the stylobate to a robust man who goes unshod, whereas the slenderer Ionic and Corinthian columns recall female proportions and wear a "shoe" in that they stand on separate, beautifully profiled bases.<sup>10</sup> Yet Vitruvius would disagree with Hersey's interpretation of his own

text, in that the Roman author clearly believes that all architectural members are stone translations from original *wooden* forms, according to the "truth of nature" (4.2.6).

A different, but equally global interpretation of architectural features has recently been suggested by Anton Bammer. In his study of the fourth-century Artemision at Ephesos, he noted that its moldings and capital arrangements imitated the forms of its Archaic predecessor. He ascribed this intentional Archaism not simply to tradition and the desire to cite the lost building, as we would expect, but specifically to the intent to express the autonomy that the area had enjoyed during the Ionian independence of the sixth century. From this specific observation and the conclusion he had drawn, Bammer then developed a whole hypothesis that the horizontal layering of Greek architecture represents a linear projection of Greek class differentiation, and tabulated what he considered aristocratic versus democratic form structures. He supported his theory on psychological/anthropological grounds, and, like Hersey, used a semantic approach on the principle that architecture is a non-verbal form of ex-

pression.<sup>11</sup> I can agree with this general idea, but find the Ephesian evidence as debatable as Bammer's interpretation of it. The Classical Artemision was a huge building that took generations of workmen and supervisors to complete. Even if patterns and proportions had been established by the primary architect at the inception of the task, variations and modifications in the course of the lengthy process would have been inevitable; in addition, given the size of the tem-

ple, some of the details mentioned by Bammer must have been virtually invisible from ground level.

Potentially more fruitful is an analysis of the orders as expression of political affiliations, support, or trends, but even such claims are difficult to substantiate. It is often stated, for instance, that the fifth-century stoa built by the Athenians at Delphi used Ionic columns (rather than Doric) to suggest not only solidarity with the Asia Minor cities in their struggle against the Persians, but also the victorious role played by Athens in such a fight. Yet practical as well as aesthetic considerations may also have contributed to the choice of orders, not just in this case, but in many others, especially as political implications may have changed with time.<sup>12</sup>

So far, the various theories cited, whether ancient or modern, have dealt with the Greek temple as a whole. Yet our topic is specifically architectural *sculpture*. We might implicitly accept the tenet that an ancient Greek might have found little difference between carving a capital and sculpting a statue, simply a matter of degrees of skill and, perhaps, specialization. But carving must have been involved for the element to qualify as sculpture, even *sensu lato*.<sup>13</sup> I shall therefore review the various parts of a Greek *temple*, in trying to determine if and when they ever carried sculptural and meaningful embellishment, with some attention to geographical preferences. Little or no attention will however be paid to possible iconographic messages, which shall form the focus of future chapters; here only a basic distinction between narrative/figural and symbolic/abstract will be attempted.

## Specific Details: Bases

By ancient convention, only Ionic and Corinthian columns were given separate bases, therefore only these two orders come under consideration, and carry with them some temporal and geographical implications, Corinthian being a late development not to be expected before the end of the fifth century, Ionic being predominant in Asia Minor, the Ionian islands, and Attika, with some sporadic example in Northern Greece and Magna Graecia. If any meaning was implied in the Attic-Ionic base, with its alternation of torus-scotia-torus, it was merely to suggest, like a spreading cushion, its response to the weight of the shaft. Even the elaborately decorated bases in the North Porch of the Athenian Erechtheion (fig. 3, cf. ill. 6) seem simply to match corresponding patterns in the capitals, and I would be hard put to assign a message to the guilloche motif, except to point out its age-old tradition and its

wide-ranging appearance, from vase painting to relief and architectural terracottas, from stone moldings to jewelry, from textiles to metalwork. Whether by the advanced fifth century anyone was still aware of its ultimate Oriental origin (when it might have symbolized water) is debatable. 14

The Asiatic-Ionic base, whether of the Samian or Ephesian variety, was considerably taller and more elaborate, but generally consisted of a bulging torus atop a lower member with either a single concave profile or one articulated by a series of ridges. Archaic Ionia, however, produced also the decorated column drum that stood directly above the base, or even on a figured pedestal below the base, so that both can certainly be ranked as architectural sculpture. These are the famous *columnae caelatae*, best known from the sixth-century Artemision at Ephesos (ill. 4), but also from Didyma, perhaps Kyzikos, and which were probably planned, even if not executed, at the unfinished Artemision in Syracuse. To be sure, all extant examples are highly fragmentary and it is impossible, on present evidence, to reconstruct their message. The Didyma figures were presumably priestesses, standing with their back to the shaft, the column fluting descending in between them. The single fragment preserved

from Kyzikos shows two naked "kouroi" facing outward while holding hands with a central "kore," as if in a chain dance. At Ephesos, by contrast, the varied personages (including perhaps a priest wearing an animal skin) encircled the drum in profile, as if unaware of the viewers, intent on their own activities. Today, only the remnants of a straight versus a curved relief background allow extant fragments to be distributed among drums and pedestals, but it seems certain that the pedestals supported the drums, although an occasional scholar still defends the possibility that the sculptured drums stood directly below the capitals, at the top of the shafts.<sup>15</sup>

Except for Kyzikos, all Archaic examples of *columnae caelatae* come from very large structures. It could be supposed that simple vertical fluting was considered insufficient decoration for the very tall shafts. In turn, the figures, at human scale, could be visualized as potential Karyatids that could not have replaced the columns, given the size of their respective buildings. Yet neither of these explanations would apply to the Ephesian evidence, where the subjects must have been narrative, even if we cannot fathom them now, as were the carved pedestals added to the elaboration of the shafts.

The fifth and fourth centuries are times of hardship and subjection to the Persians (or to the Athenians) for most of the East Greek cities, yet



these cannot be the main reasons for the absence of temple construction. Probably the basic religious needs had been satisfied by existing buildings, and replacements became necessary only toward the beginning of the Hellenistic phase. At Ephesos, the Artemision was reconstructed along somewhat different lines after its predecessor was destroyed by fire in 356, yet many details were repeated, including "narrative" sculptured drums and pedestals, to recall the earlier structure, as I believe, not for political, but for religious reasons. This penchant for quotations is a distinctive ancient practice, attested not only in visual monuments, but also in literature and plays; <sup>16</sup> we should recognize it as a necessary corrective to our modern interpretations, since we tend to stress originality and individuality instead. At Didyma, not only did the Temple of Apollo receive a more grandiose layout, but also the difference from the Archaic structure ruined by the Persians in 494 was considerable. Carved

column drums were eliminated, and low plinths were introduced under the bases; on the front, each base carried a different decoration and was paired with a matching companion on either side of the central axis. Only a few of the carved motifs on such bases were figural (fig. 4); some were floral (fig. 5), and others were pure (?) patterns, including the maeander.<sup>17</sup>

At Chryse, in the Troad, carved column drums appear for the first time, to our knowledge, on the second-century Temple of Apollo Smintheus. Here, however, traces of flutes *below* the carvings conclusively show that the figured drums stood at the top, not at the bottom, of their respective shafts, like elaborate collars. Intriguingly, their decoration varies, some of them carrying narrative topics, others presenting a "monotonous" chain of alternating boukrania, garlands and phialai. The preserved column bases seem to show a mixture of Attic and Ephesian forms.<sup>18</sup>

## Column Shafts

Insofar as carved drums can be considered part of the column proper, the possible embellishment of an (Ionic) column has already been considered. Yet, by and large, whether Doric, Ionic, or Corinthian, the Greek column shaft was left plain, articulated only by vertical fluting that seems to have served a purely optical purpose, rather than a symbolic one.<sup>19</sup> Some Ionic columns, however, added a carved patterned collar (usually carrying an anthemion)<sup>20</sup> at the top of the shaft, below the capital proper that was traditionally cut from a separate block. The



best-known examples of this embellishment are the Erechtheion columns (ills. 5-6), but the practice goes back to Archaic times: at the so-called Polykrates' Heraion on Samos, the Temple of Apollo at Egyptian Naukratis, even (in the fifth century) at Magna Graecian Lokroi and Metapontion. The element is conspicuous, and it would have been even more so with its original colors preserved. It is therefore hard to imagine that it had a purely decorative function. A practical purpose could tentatively be postulated for its origin in times when shafts were of wood, perhaps combined with stone capitals: the collar, initially in metal, would have been a band covering, and thus strengthening, the join between the two separate members.<sup>21</sup> The vegetal motifs, in more or less stylized and elaborate forms, usually carved over the extant stone collars, could be said to have chthonic meaning, with the usual symbolism of regeneration and resurrection we assign to ancient vegetation patterns. But wheth-

er such interpretations are purely modern constructs we cannot tell. It is important to note that at Naukratis, allegedly under Egyptian influence, the floral chain consisted solely of lotus buds and flowers, without palmettes; even more surprising, at Metapontion (ill. 7), the main motif was a chain of running spirals between framing maeander borders, so that the vegetal character prominent in other areas of the temple was totally absent.<sup>22</sup>

Chronology and geographical distribution are of some interest. The feature seems to originate in Archaic Asia Minor, and from there to spread to Egypt and eventually to South Italy, reaching Athens at the time when the city was interested in stressing its Ionian connections. There is then an apparent gap until the mid-fourth century, when anthemion collars return to the Asiatic coast and nearby areas. At Samothrake they are particularly striking because they occur on the Ionic propylon to the building formerly called the Temenos (now "Hall of the Choral Dancers"), which is also adorned with an Archaistic frieze. This combination therefore suggests that the entire building, perhaps to stress its own venerability, used motifs and formulas typical of earlier times, in a revivalist spirit already partly noted for Ephesos. I now see the Archaizing/Classicizing movement as part of a much larger phenomenon that took place not simply in architecture, but also in sculpture, coinage, and (per-

haps later) even in epigraphy, and that would need separate study.<sup>23</sup>

A similar chronological pattern could be suggested for Karyatids and Telamones (Atlantes). They find place in this section because they could be considered another form of shaft elaboration, although the entire



column is usually replaced by the human figure. Various interpretations have been given for these surprising supports, and they shall be discussed in a future chapter;<sup>24</sup> yet there is no denying that a specific meaning accrued to them, given the greater expenditure of money and time that must have been involved in their carving. Of sure Eastern origin, the female form seems to occur for the first time on Archaic treasuries, specifically at Delphi, although some earlier instances could be suggested for the Athenian Akropolis. The first proven association of Karyatids with a temple is at the Classical Erechtheion (fig. 6); yet the South Porch which they embellish may have been meant to mark the location of Kekrops' grave. In the Hellenistic period,<sup>25</sup> Karyatids become popular for funerary monuments and theater façades, with a definite shift from the original meaning that extends to their being shown in high relief, against walls or piers including the late Hellenistic (late Republican Roman?) wo-

men on either side of each arch opening of the  
Monument of C. Memmius in Ephesos.

Their male counterparts, the Telamones, are especially (at first, exclusively) popular on Italic territory, comprising non-Greek areas, but the first known Greek examples are on a temple: that of Zeus Olympios at Akragas (ill. 8), of the fifth century, although they do not replace the Doric columns with which they alternate. In the Hellenistic period, like the Karyatids, they appear on theater façades (including at Athens), and even as the decoration of private houses; here too, identities change, but the supporting function is always clearly expressed through the pose. The earliest figures, at Akragas, in very high relief, recall the Herakles of the Olympia metope, supporting the heavens for Atlas who brings him the Apples of the Hesperides (fig. 7). But Herakles is shouldering that burden temporarily; his posture is therefore allusive of the Titan whose punishment it is to bear the load in perpetuity hence the alternate name Atlantes, preferred by the Greeks for the male "Karyatids" (Vitr. 6.7.6). The term

favored by the Romans and more frequently used today, Telamones, is also a punning reference to function, since the name means "support" and specifically the broad leather strap for carrying sword or shield. The difference in the nomenclature for the female figures may therefore be significant, and so is their more varied stance through the centuries. Note, in fact, that the Erechtheion "Korai" (as they are listed in the building accounts) shift their balance, so that one of their legs trails free of weighta somewhat relaxed posture for a person carrying a heavy load. Other Karyatids raise one hand, thus appearing to hold up the superstructure with even less effort.

In Roman times, Karyatids and Telamones can be converted to the specific meaning of captive barbarians and defeated enemies. The appeal of the type continues to our days: at the Disney Company Corporate Headquarters in Burbank, California, built by Michael Graves in 1989-1991, Snow White's Seven Dwarfs have been given the same function, holding up the pediment. 26

## Column Capitals

A square post or a round column can support an entablature without a capital; the function of this transitional member is therefore purely aesthetic, as best exemplified in the Doric order, where the round shape of the echinos expands on the cylindrical contour of the shaft, and the square abacus partakes of the nature of the epistyle blocks. Yet carved floral ornament can appear on some forms of Doric capitals, and the echinoi of the Ionic order are consistently decorated with egg-and-dart or other motifs, whether in relief or paint.<sup>27</sup> Finally, the entire Corinthian capital is a spectacular display of stone foliage that required considerable carving skill. This is not the place to discuss the various other forms of "anomalous" capitals attested during the Archaic periodthe so-called Aiolic variety, for instance, or the palm type, the latter eventually re-emerging at Hellenistic Pergamonwhich bespeak the widespread experimentation of the time and can be grouped under the general heading of vegetal im-

itations.<sup>28</sup> We shall here concentrate on those of the three established orders. To be ranked as architectural sculpture, however, capitals should also carry some specific meaning. Can we prove the case, at least in some instances?

Modern authors and architects have certainly thought so. We have already mentioned Hersey and his comments on the Doric echinos, as well as his interpretation of columns as sacred trees. Any vegetal form of topping would therefore be a confirmation of his theory. Equally significant may be the tendency, in the nineteenth century, to replace the akanthos leaves of the Corinthian capital with local flora, in order specifically to imbue the carvings with a regional meaning: a wonderful example are the capitals of the current Playmakers Theater at the University of North Carolina at Chapel Hill. Completed in 1852 as a grand ballroom, and named at the time Smith Hall after benefactor Benjamin Smith, it was built by the architect A. J. Davis, who provided its tetrastyle prostyle front with luxuriant capitals decorated with "the

American grains of corn and wheat." Other similar instances elsewhere could be cited. 29

The architects and theoreticians of that Romantic phase sought inspiration from Greek forms which they used as part of their own building vocabulary. Henry van Brunt, in an article in the *Atlantic Monthly* of 1861 that is considered one of the foundations of the Neo-Classical movement,<sup>30</sup> could write about Greek vegetal ornaments: "The inventor studied not alone the plant, but his own spiritual relationship with it; and ere he made his interpretations, he considered how, in mythological traditions, each flower once bore a human shape. . . . And so he took Nature as a figurative exponent of humanity, and extracted the symbolic truths from her productions, and used them nobly in his Art."

Even earlier than the Neo-Greek romantics, Giovanbattista Alberti had seen a specific message in the so-called composite capital, which seems to be a Roman (Flavian) invention. In 1452 he described it as representing "a successful Roman attempt to express their power over their principal challengers, the Greeks, and thus over everyone else, by taking the two best Greek forms, Ionic and Corinthian and arrogantly pressing them together." This interpretation may seem far-fetched, because the Greeks of the late first century after Christ could hardly pose a military challenge to Roman power, yet it is cited with approval by John Onians, and might even be supported if, instead of Greeks, we think in terms of the Hellenized Jews, since one of the first instances of the composite capital occurs on the Arch of Titus celebrating the Jerusalem triumph.<sup>31</sup>

Vitruvius (4.1.9-10) tells a charming story about the origin of the Corinthian capital: how an akanthos bush grew around a basket placed over the grave of a young maiden of Corinth, thus giving inspiration to the sculptor Kallimachos. The first known example, from the interior of the late fifth-century Temple of Apollo at Bassai, in Arkadia (ill. 9), could confirm at least the possible date for the inception of the form, but there the allusion would seem hardly funerary. Yet akanthos finials in a variety of forms are shown atop gravestones depicted on white-ground lekythoi of even earlier date. Apollo, the god associated by the Greeks with sudden male death, might well have deserved the tribute, and the isolated position of the Bassai columnthe sole Corinthian example within an Ionic colonnade- seems indeed to confer on it a special meaning.<sup>32</sup>

The next chronological instances of Corinthian capitals occur in the interior of buildings whose purpose is still unclear and under discussion: the Tholos at Delphi and that at Epidauros. The former will be discussed in a later chapter. As for the latter, the exuberance of its interior order should be seen in conjunction with the floral presence sculpted throughout the building: in the coffers, on the sima with rampant antefixes, in the roof finial, and even in the exterior metopes, all of which carry a single but ambivalent rosette-phiale motif. The entire structure seems a major "Exaltation of the Flower," which could hardly have failed to convey a specific, if to us cryptic, message. 33

One final instance may be cited to support the theory that specific capitals could carry different implications. At the Sanctuary of the Great Gods at Samothrakea site that held mystery rituals with great international participation an elaborate propylon was built by Ptolemy II around 285-281 B.C.E. A nearby torrent was diverted so that it could run under the gateway, which spanned it with an unusual vaulted tunnel; the visitors who entered the sanctuary were therefore made to cross water, perhaps for symbolic or ritual purposes. The structure was oriented east-west with hexastyle amphiprostyle porches, but while one façade had Ionic columns, the other was in the Corinthian order. As Alfred Frazer states, the differing design of the two fronts "surely must have depended on the desire to recognize the different spheres they faced: the eastern Ionic façade facing the secular world, and the western Corinthian façade confronting the sacred precinct of the sanctuary."<sup>34</sup>

As in the case of the Sidonian sarcophagus, it may be objected that an early Hellenistic propylon is not a temple and cannot therefore be used to validate the assumption of meaning in earlier religious examples. Yet the Samothrakian propylon is filled with cultic symbolism, including an exterior frieze of boukrania alternating with rosettes/phialai. Seen from a distance, this repetitive pattern looks almost like a triglyph-metope course: on the one hand, it serves to bind the prostyle porches to the solid core, and, on the other, it makes the whole building appear like a major votive offering. Be that as it may, the present purpose is not to decipher meanings, which may indeed change with time and place, but to ascertain the possibility that meaning was intended.

It is perhaps significant that Corinthian never became an "order" in the sense of the Doric and the Ionic (although the nomenclature is a Renaissance translation Vitruvius uses the more flexible term *genus*), but each Corinthian capital is a virtual unicum, with variations in volutes,



central ornaments, and leaves, that may have carried their own message, perhaps today incomprehensible. More explicitly, in the Hellenistic period, divine figures appear among the *akanthos* leaves in place of the central fleuron, adding to the symbolism: besides the many vegetation goddesses (half human, half *akanthos*) of Asia Minor, some second-century examples from the Asklepieion at Messene (therefore on the Greek mainland) exhibit the naked bodies of winged Nikai and Erotes emerging from the foliage and holding spiral stems. This figural type of addition to the vegetation of capitals may have an even earlier (fourth-century) history on Magna Graecian and Italic soil, especially at Taras; it will become a favorite of the Romans<sup>suffice here to recall the Hercules amidst the *akanthos* of the (composite) capitals from the Baths of Caracalla.</sup>

35 By the end of the second century B.C.E., the so-called "Chimaera capitals" appear. They are first attested within the cargo of the Mahdia ship,

which was meant for an Italian market, but the type becomes well known in Greece proper as well. By a recent count, at least 40 examples have been found at 18 other sites, in both countries. The "chimaerae" are actually the winged lion-griffins of the Persian variety we first encountered on the Alexander Sarcophagus; once again, their purpose may be apotropaic, but it is also highly decorative they recur at the base of marble candelabra of a type that was used only in Italy.<sup>36</sup>

The Corinthian capitals of the Samothrake propylon are still entirely vegetal, but they are backed by antae topped by sofa capitals with figured decoration. This form of pilaster capital has an early origin, and some rare Archaic examples carry figured scenes; yet among the corpus of existing Hellenistic items, only those of the propylon and those of the interior "courtyard" of the Didymaion exhibit meaningful reliefs.<sup>37</sup> Those of the Asia Minor temple carry themes clearly appropriate to Apollo (ill. 10, figs. 8-9); those of the island gateway have two eagle griffins tearing up a fallen deer, with an age-old motif that cannot be considered mere decoration. Are these spiky, ferocious animals guarding the sacred precinct?

Of the three orders, the Doric has the simplest capital, its carved figured decoration, as mentioned above, limited both chronologically and geographically. The Corinthian, as we have seen, has the most elaborate. The Ionic capital falls in between the two, although definitely leaning toward the ornate. It became increasingly so with time, but as early as the Athenian Erechtheion it could introduce a carved guilloche pattern between volutes and echinos; in addition, in the North Porch (cf.



ills. 5-6, fig. 10), the eyes of the braid were filled with glass beads of four colors that must have added shine and reflected light to the painted polychromy. Gilded wire was countersunk between the turns of the volutes, ending in golden tassels that hung over the space usually reserved for carved palmettes. The eyes of the volutes themselves were gilt.<sup>38</sup> The total effect would have been striking, especially by comparison with the relative austerity of its neighbor, the Parthenon. Yet it is hard to tell whether this elaborate decoration, enhanced even with respect to the simpler Ionic capitals of the east and west façades, carried a symbolic meaning. Any archetypal allusion to vegetal forms in the volutes, as some would claim, was surely lost amidst the wealth of other abstract patterns. That the North Porch was however singled out from the rest of the building by means of the special richness of its architectural details seems an inescapable conclusion.

In the Ionic capitals of the Hellenistic period, both the baluster side and the front canalis could be embellished with additional (usually floral, but occasionally more specific) motifs, and a special form of the type carried busts. We are most familiar with those in the volutes of the Didyma capitals, which are fully Roman even if planned at an earlier stage; but Hellenistic examples exist, once again in Sicily, and attest not only to the general tendency for increased decoration and symbolism, but also to the rapid spread of architectural practices among the different areas of the Hellenized world.<sup>39</sup> For the floral decoration of the canalis we may refer again to the Propylon of Ptolemy II at Samothrake; and an example of the meaningful embellishment of the baluster side has been forcefully brought to our attention by the recent exhibition in our country of fragments from the "Altar" of Pergamon, which include an Ionic capital with flaming thunderbolts (fig. 11). The symbol may allude to

Zeus as one of the "owners" of the "Altar," but it may also be an emblem of royalty appropriate to the Attalid sponsors of the structure.<sup>40</sup>

It should finally be pointed out that columns, usually with Doric or Ionic capital, could be used in isolation to mark a grave or as turning posts on racing courses. These functions seem to emphasize the symbolic value inherent in this architectural element even when removed from a larger structural context.<sup>41</sup>

## Walls

We are accustomed to thinking of Greek temple walls as completely undecorated vast expanses of luminous white marble. Yet this was not



always the case. Whether such walls carried *carved* decoration may be debated, but certainly they were once more colorful than we visualize them, at least during the earliest phases. Terra-cotta plaques with painted designs from Magna Graecian Lokroi have been considered revetments for sun-dried mudbrick walls, and similar painted ornaments on stone structures have been postulated not only on the basis of Geometric temple models, but also on the evidence of scant remains from Isthmia.<sup>42</sup> More tangible remains can be cited for possible ornamentation in bronze that was nailed to the wall surface; many of the extant examples come from Olympia, but others occur elsewhere and may justify the ancient literary references to "brazen walls."<sup>43</sup> Finally, small votive stone structures in the shape of temples, from Sardis and Chios, display relief figures on their walls, and have helped argue that some frieze blocks at present without definite place on an entablature may have come from walls. An

orthostate dado comparable to those of the Assyrian palaces has been postulated for Prinias, and other relief slabs have been interpreted as immured on the exterior of built tombs. All these examples are Archaic and may partake of that love of experimentation that characterizes the early phases of Greek architecture. An example of processional compositions along the side walls of a small structure belongs to the mid-fourth century, but the building is neither Greek nor a temple: the Heroon of the Lykian dynast Perikle at Limyra.<sup>44</sup>

In later periods, figured friezes can be attested *atop* blank walls, but these usually stand behind columns, so that the carvings cannot be considered external. As a typical example, we can mention the decorated metopes of the Doric frieze crowning the wall of the fourth-century Tholos at Delphi; their figures can be identified, despite their highly fragmentary state, because their scale is smaller than that of the outer metopes, above the columns, also carved in high relief. Another example, albeit Karian rather than strictly Greek, is the chariot-race frieze that is usually assigned to the top of the cella wall of the Halikarnassos Mausolleion (ca. 360-351). Given the participation of Greek workmen to the erection of this grandiose tomb, this occurrence can be cited, although neither the structure nor its sculptural program fits within the parameter of Greek religious architecture. Definitely Greek, but not a temple, is the Pergamon "Altar" with the long Telephos frieze covering the inside face

of the wall surrounding the central courtyard; the carvings could receive close inspection, but they were meant to be first seen through the colonnade in front of them (fig. 12).<sup>45</sup>



Somewhat different are the moldings that run along inner walls as continuation of engaged columns and pilasters. Perhaps the best example is the fourth-century Temple of Athena at Tegea. The interior of its cella was lined on three sides by engaged Corinthian columns, which in turn supported a second story of engaged Ionic columns. The carved molding of the bases for the lower order continued along the wall as a *toi-chobate* and was echoed by the carved *epikranitis*, to create richly ornamented horizontal accents punctuated at mid-wall by the vegetal motifs of the Corinthian capitals. At the same time, the fluted column shafts and the shallow bays of the intercolumniations produced a general rippling effect over the interior surfaces, syncopated by the vertical rhythm of the engaged columns.<sup>46</sup> The total effect may have alluded to a sacred grove. A similar imagery may lie behind the pilasters of the inner courtyard at the Hellenistic Didymaion (cf. ill. 10), although their sofa capit-

als, as we have mentioned, carried figured decoration which continued as a carved strip atop the wall, from pier to pier.

The case of the Erechtheion at Athens differs because the anthemion frieze (fig. 13, cf. fig. 10) that crowns the wall proper is on the exteriora virtual continuation of the collars on the Ionic columns of the porches. It has been argued that the various types of moldings along the outside of this anomalous temple are meant to reflect the interior arrangement, with cellas at different levels allocated to two different divinities; yet the five variations do not correspond to the actual divisions of the space within the building.<sup>47</sup> Note, moreover, that the Nike Temple exhibited the same anthemion ornament as the Erechtheion, only rendered in paint rather than plastically. While the ancient visitor to the Akropolis would have immediately acknowledged the (cultic?) links between the two structures because of the repeated decoration, we tend to assign value to the carved rendering and to ignore the painted one, which we can no longer see. This is, obviously, a modern problem.<sup>48</sup>

Taking a molding in isolation, whatever its decoration, the question arises whether any meaning at all can be ascribed to it. A negative answer is given by Altekamp, who believes that neither the kymation nor its execution is connected to the purpose of a building or the personality of the sponsor.<sup>49</sup> Once again, the truth may lie somewhere in between, with different solutions requiring different interpretation, on an individual basis. When the molding is carved with an anthemion, the tendency to ascribe a special message to it is inevitable, but egg-and-dart, Lesbian-leaf, tongue patterns (cf. ill. 3), and similar motifs are too universal in their occurrence, in different and often inconspicuous posi-

tions, to be properly meaningful. If a symbolic content was ever envisioned, it may have lost its impact or its intelligibility with time. Certainly, ancient sources do not hint at it. Yet there is no denying the very clear aesthetic value of a horizontal molding: not only does it serve to mark the transition from member to member of a tectonic structure, it also conveys in frontal view the volume and, as it were, the profile of the member that carries it.<sup>50</sup> Originating perhaps from the practical need to seal a join, as in carpentry, the carved moldings added immeasurably to the richness of a structure while suggesting its stylistic (ethnic?) connections, some patterns being more typical of the Ionic than of the Doric order. That the Siphnian Treasury is an Ionic structure is in fact conveyed not by columns, capitals, or continuous friezes, but by the types and size of its moldings.<sup>51</sup>

## Friezes

The case of the Erechtheion anthemion is all the more striking in that the ornament occurs below an entablature enriched by fasciae and a continuous figured frieze (cf. fig. 10). These are the areas of figured architectural sculpture par excellence: the frieze quite frequently, whether Doric, and therefore articulated into triglyphs and metopes, or Ionic, and therefore as a continuous expanse; the architrave (epistyle), rarely, but then almost taking on the role of the continuous frieze. We shall therefore not dwell on the standard forms, pointing out only the anomalies.

Decorated architraves are such an anomaly. They occur primarily in Asia Minor, but not solely on Ionic buildings; that of the Doric Athenaion at Assos (sixth century) (ill. 11) is the best known, all the more surprising in that the outer metopes also carry reliefs. Of the other attested instances, the Archaic Temple at Didyma seems to have had figural ornament only at the corners, probably with apotropaic function. One more Ionic example belongs to a non-Greek structure: the so-called Nereid Monument at Xanthos, the tomb of a Lykian dynast, probably Arbinas, datable around 380 B.C.E. (ill. 12, fig. 14). It is here mentioned solely because, like the Halikarnassos Maussolleion, it is heavily influenced by Greek temple architecture, but its decorative formulas partake of both the Hellenic and the Oriental tradition, and therefore cannot be taken as the rule.<sup>52</sup> It bears repeating in this section that temple epistyles at major sanctuaries were a favorite location on which to hang weapons, espe-

cially shields, taken from the enemy, although the resultant decorative effect cannot be considered architectural sculpture; the

tradition, however, may lie behind the Hellenistic so-called weapon friezes. 53

Continuous friezes, as an entablature member, occur first, as it now seems, on Kykladic structures, but no carved decoration on them has been found earlier than on the Ionic treasuries at Delphi, of which the Siphnian is such a splendid specimen. Terracotta figured friezes, but in various positions, may be considerably earlier, but they occur primarily in Asia Minor, Crete, and especially Italy and Magna Graecia. It is therefore all the more surprising that the mid fifth-century Ionic temple at Metapontion should have a non-narrative, non-figured anthemion on its continuous entablature frieze (cf. ill. 7). Not only is it in stone, but it occurs in conjunction with dentilsa combination which does not recur until a century later (at Samothrake). We have already commented on the equally surprising column collars from the same temple, decorated with running spirals and maeander borders, rather than the more traditional floral chains.<sup>54</sup> At present, the continuous narrative stone frieze

seems to be an Attic triumph of the fifth century, with all subsequent others appearing either on anomalous or on non-Greek structures, finally to dwindle as glorified moldings or nostalgic citations during the Hellenistic period.<sup>55</sup>

The Doric frieze, because of its rhythmic arrangement, could always be considered decorative, even when the metopes are blank. The triglyphs visually continue the flutings of the columns, aided by regulae and guttae in their climb past the horizontal accent of the architrave. Usually, however, only the metopes carry decoration, whether in paint alone, on terracotta plaques, as occasionally postulated, or as terracotta and stone reliefs; either as narrative or as "monotonous" repetition of the same motif.<sup>56</sup> More surprising is the occasional decoration of the triglyph itself: some Archaic examples have ornate moldings or floral motifs embellishing either the projecting or the sunken elements of the triglyph, but the effect is discreet and subdued. Not so some Hellenistic specimens, like those on the third-century Stoa of Antigonos Gonatas on Delos (fig. 15); its metopes are blank but plain triglyphs in bluish marble alternate with some in white marble, over the intercolum-

niations, that carry the head of a bull in high relief. Cultic objects appropriate to the worship of Demeter and Kore are carved on the metopes and triglyphs of the late-Hellenistic Lesser Propylion at Eleusis.<sup>57</sup>

We should also mention, because of its anomaly, that a Doric frieze with decorated metopes (Amazonomachy) appears atop the podium

supporting an Ionic naiskos depicted on a pair of Apulian, mid fourth-century loutrophoroi attributed to the Metope Painter. The podium itself is decorated with vegetal motifs, in one case surrounding a central female protome; the naiskos on both vases is more properly a tetrakionion, without walls, like a baldacchino over images (statues?) of the deceased with attendants. Whether such non-canonical positioning of a Doric frieze was ever realized in stone architecture is now impossible to tell. 58

## Upper Entablature

Under this term, I shall consider the various parts of a Greek roof, whatever its order. Perhaps the easiest member to discuss is the dentil course, of the Ionic and outer Corinthian order, because it requires minimal attention. Its first archaeologically attested occurrence, at present, seems to be not on a real structure, but on the relief "naiskos" of a funerary stele from Sinope. It shows a seated woman and her attendant between Ionic columns supporting a series of dentils, and it has been dated around 460 B.C.E. The next example would seem to be the mid fifth-century Ionic temple at Metapontion (cf. ill. 7), which combines the dentil course with a continuous carved frieze, but Athens uses dentils and frieze course as mutually exclusive (e.g., on the Erechtheion, where the dentils appear only on the lighter entablature of the Karyatid Porch [cf. fig. 6]), until 334, when the Choragic Monument of Lysikrates (cf. col. pl. 5) employs both but above Corinthian columns. In East Greece, however, the (ca.

340) propylon to the "Temenos" at Samothrake belongs to the Ionic order and marks the beginning of a new convention.<sup>59</sup> Only the Hellenistic Didymaion, to my knowledge, exhibits decorated dentils, but their floral panels may be motivated by size (quite large, to be in proportion with the rest of the huge building) rather than by meaning.

Coffers are another natural area for sculptural decoration, and need not detain us long. Those of wooden cella ceilings are no longer preserved and only building accounts (e.g., from the Asklepieion at Epidaurus) testify to their ornateness: ebony, ivory, metal appliqués, and above all paint would have been the typical embellishment of this feature. But the pteroma and porches of a Greek temple often had coffers in stone, and several remain. The earliest examples may have been simply painted, with floral or astral motifs, as normal for a position that

implied an upward look from the visitor. Gradually, however, since the early fourth century, faces were introduced within the panels, and then entire scenes, although peculiar for the unnatural perspective they required. Among the most successful coffer decorations are the spectacular flowers, separately carved and pinned in position, of the Tholos at Epidauros; among the most elaborate are the Gigantomachy scenes from the Athenaion at Priene, both of the fourth century. The one prominent example for the Hellenistic period is the Belevi Mausoleum (ill. 13), whose coffers included a Kentauromachy. But the preference for narrative compositions seems to have decreased with time, so that later structures reverted to more intelligible geometric or abstract patterns. 60

Cornices (*geisa*) during the Archaic period could be covered by terracotta revetments, both in Asia Minor and other areas, although not all of them carried figured compositions. By and large, however, structural members were left plain, or at least simply painted with floral motifs, and the Doric order had a "built in" form of abstract, rhythmic decoration in the mutules and viae-again, in response to regulae and triglyphsthat articulate the soffit of the horizontal cornice. Here we should mention, however, the engraved designs on the soffit of the marble raking geison of the so-called Hekatompedon on the Athenian Akropolis. Whatever its proper designation and location on the citadel, this large temple to Athena is datable around 560 B.C.E.; its pediment was framed by large slabs on which huge lotus flowers alternated with water birds seen as if from below in flight overhead. Paint enhanced the incised outlines, and the effect must have been quite startling. The storks among the birds

may have been an allusion to an area of the citadel, the Pelargikon ( $\pi\in\lambda\alpha\rho\gammao\zeta^*$  = stork), and seagulls may have hinted at Athens' connection with the sea. But the lotus flowers are less easy to explain and the practice seems to have found no later echoes (ill. 14, cf. n. 61).<sup>61</sup>

The soffit of the raking cornice could be considered part of the pedimental area, which is itself one of the primary locations for sculptural decoration. Here, Greek terminology is not revealing of origin or function, since it uses the plural noun for "eagle" in obvious allusion to the triangular shape that resembles a large bird with outspread wings; tympanum is the Latin equivalent, which gives rise to Hersey's interpretation. Not all such gables were conceived of as shelves on which sculpture could stand, however, and indeed the (apparently general) ancient intellectual acceptance that men, chariots, and beasts could plausibly

move at such levels seems, in retrospect, surprising. Geographic preferences may reflect initial difficulties with such a conception.

During the Archaic period, as already mentioned, sculptured pediments were especially popular on the mainland of Greece and the neighboring islands, such as Corfu (cf. ill. 38) on the one side and Euboea on the other. The Kyklades and Asia Minor, perhaps because of the shallowness of the Ionic horizontal cornice, seem to have used no tympanal embellishment unless it was painted and is now lost. Even in Doric buildings of Magna Graecia, the preference was for large, apotropaic gorgoneia set in the middle of a shallow area constricted, as it were, by large and very colorful terracotta revetments carrying abstract patterns; only after 480 are examples of pedimental sculptures definitely attested on Italic soil.<sup>62</sup> The practice of gable decoration became however almost universal during the Classical period, although the Kyklades and Asia Minor may have held back. Certainly the Hellenistic Artemision at Magnesia (ill. 15) had its tympanal wall pierced by three large openings, perhaps for

ritual purposes. Eventually pedimental sculpture dwindled entirely, but its inclusion, at any time and place, as particularly meaningful architectural embellishment needs no defense here.

Decorated simas can be grouped under two categories: those that carry figured waterspouts, as an intrinsic part of their function, and those that are decorated with motifs for their entire length, thus ranking closer to moldings than to structural, functional members of the entablature. The first category is easily discussed, since the carved spouts constitute undoubted sculpture, and may possess specific meanings: lion heads, perhaps inherited from Egypt, have purificatory and apotropaic function; other types of spouts may pun on the city's name and geographical location (like the Archaic seals of Phokaian Lar-

isa; (*φώκη* = seal), or be appropriate to the individual divinity (like the hounds and boars of the Artemision at Epidauros), or even simply symbolize a sacrificial animal (like the perhaps purely decorative rams' heads of the Peisistratid Telesterion at Eleusis). The terracotta heads of Nymphs, men, and satyrs from Thermon (the second Apollonion?), some of them releasing

water through slits in their throats, are less easily explainable, and must have looked gruesome; they are however closer to antefixes than to a regular sima. Another anomalous example is the parapet surrounding the roof of the Archaic Artemision at Ephesus (cf. ill. 4); it ranks as a sima, since it was pierced at intervals by lion-head spouts, but its height and complexity, combined with the possible lack of a gabled roof, qualify it as a balustrade. It carried figural deco-

ration, and, apparently, a variety of subjects, now difficult to reconstruct but which probably included a Kentauroomachy and a Gigantomachy.

63

The second type of sima, in the Archaic period, is usually raking; it therefore serves no specific function in eliminating rain water from the roof and its continuous surface is traditionally decorated with patterns or floral motifs. That of the Siphnian Treasury, at Delphi, surprisingly shows lions in relief, on each corner, walking up toward the apex of the roof (ill. 16). This motif of corner decoration has been connected with an East Greek practice that influenced some Archaic Magna Graecian buildings, and may have continued into the Hellenistic period.<sup>64</sup>

Around 400 B.C.E., another type of sima developed, running continuously along the sides of the building, with antefixes climbing above the upper edge and punctuating its contourthe so-called rampant antefixes (cf. col. pl. 6). This uninterrupted band, even if pierced by waterspouts at regular intervals, could also carry floral decoration, and introduce motifs with specific significance. The best known example is probably the gutter of the Classical temple at the Argive Heraion, which added the cuckoo, a bird sacred to Hera, perched above the tendrils (ill. 17). The same bird stood upon the scepter held by the gold-and-ivory statue of Hera in the cella (Paus. 2.17.4). The choice of sima pattern was therefore meaningful and intentional, to establish a visual correlation between the cult image in the interior and the outer architectural embellishment. A later and more elaborate (raking) sima, albeit in terracotta, shows winged female figures emerging from akanthos foliage and reaching toward

a floral centerpiece; the total effect is so rich that the composition has been called "the Glorification of the Floral Symbol," and the element, although found out of context at Messene, has been attributed to the Temple of Aphrodite on the strength of its decoration.<sup>65</sup>

Antefixes are functional, in that they originally served to close the openings of cover tiles along the eaves of a sloping roof, but they were soon decorated and should therefore be included. They have already been mentioned, both as rampant, above the lateral sima, and as anomalous human-head waterspouts in terracotta, at Thermon. Even rampant antefixes can consist of human headswe encountered them earlier on the Alexander Sarcophagus, but the type with female and male protomai is particularly popular on Italic soil, albeit in terracotta. This is in fact the medium par excellence of these ornaments, when not carved in one with the marble sima; but they certainly can count both as architectural embellishment and as meaningful elements. On Thasos, an



Archaic series of triangular shape has a quasi-narrative content, since it shows Bellerophon on Pegasos alternating with the Chimaira, so that a set of two suggests the story. In Sicily, spectacular series of Archaic satyr masks in terracotta, from Naxos and Gela, can rank as sculpture, despite their mold-made origin; when such satyrs occur with female heads, the latter have been identified as Nymphs, with a special meaning of sacredness. Gorgoneia were probably apotropaic; on a late Archaic roof at Morgantina, they alternated with lion-skin antefixes (fig. 16) that hint at Herakles and therefore, in combination, at deeds of heroes. In Hellenistic Troy, one motif was a head of Athena with horned helmet, as appropriate for the city patroness. In brief, antefixes can add a great deal to a building, and should be studied in conjunction with the total structure, although they often broke and were variously repaired through time, thus no longer corresponding to the original program. 66

Akroteria represent the final element of sculptural embellishment certainly the highest on a building. As for the pedimental compositions, we may marvel at the conception that could plausibly place figures and animals at that level indeed, it was once surmised that only divinities and creatures of the air could find proper acceptance at the position, and identifications were slanted accordingly. We have now come to accept other possible interpretations, but meanings and motivations may remain obscure. Some early examples were in bronze, some were disks in terracotta, but with elaborate ridges, spikes, and painted decoration. The enormous disk from the Archaic Heraion at Olympia, 2.42 meters in diameter, has been seen as a symbolic image of the sun, and was certainly not a casual finial for the peak of a roof, since its considerable weight and the fragility of its dentate edge must have required great technical skill to hoist it in position (ill. 18). During the late Archaic period, not only

figural but even group akroteria became increasingly popular, and continued through time, with some spectacular examples.<sup>67</sup> Regional preferences, however, seem not to have outlasted the sixth century.

Akroteria have been studied in detail, and new finds (or recognitions) continue to expand our knowledge. Among the most distinctive items, I shall mention the terracotta horse-and-rider form typical of Sicily, where the neck and head of the horse grow, as it were, from the large cover tile (the *kalypter hegemon*) shielding the ridgepole, and for which both the prominent location and the duplication required by the position have plausibly suggested that the riders are the Dioskouroi. Less understandable are the marble Amazons on horseback that climb from

the corners of the Athenian Treasury at Delphi, almost like a symbol of victory, to which we shall return in a later chapter. Equally distinctive is one of the central akroteria on the Epidaurian Asklepieion, with Koronis vainly struggling in the grasp of Apolloa rape scene surprising as a choice, even if the birth of Asklepios was its outcome (ill. 19, bottom). The complexity and visibility of such akroteria imbue them with special significance. 68

In conclusion, the picture provided by the Alexander Sarcophagus does not seem misleadingly symbolic, nor was its ornamental vocabulary created ad hoc for a non-architectural monument. On the contrary, every detail of the royal casket can be matched with an equivalent one, at some time, in some area, on a Greek temple. Some general trends in Greek architectural sculpture can be detected: great experimentation in both forms and structural locations during the Archaic period, an emphasis on external decoration during the fifth century, a tendency toward interior embellishment during the fourth, that combines with a revival of Archaic forms and deliberate citations as we come to the Hellenistic phase. Increased elaboration and a distinct preference for vegetal decoration are the hallmarks of this later production.

To answer our initial question, what can be considered meaningful architectural sculpture? we shall have to acknowledge that almost any architectural embellishment has, at some point or other, in ancient or in modern times, been defined as significant and distinct from "pure decoration." The degree of conviction engendered by such statements inevitably remains subjective and individual, and, to be sure, moldings on some buildings functioned exclusively as . . . molding-spine articulations and definitions of tectonic elements, no more and no less. Yet this analysis of architectural sculpture has pointed out, it is hoped, the great variety and wealth of ornamental vocabulary, thus belying our general impression that the ancient Greeks tended "to reduce [their] temples to a stereotype" whose "exceptional standardization . . . cannot be overemphasized."<sup>69</sup>

## Notes to Chapter 2

1. Alexander Sarcophagus, Istanbul Museum 370 (H. 1.95 m.; L. just under 3.20 m.); it is well published by von Graeve 1970; excellent detailed photographs in Schefold 1968. See also Ridgway 1990, 3745, and Ill. 16 (plan of the funerary chamber); Stewart 1993, 294306; Boardman 1995, figs. 228.13.



2. One more element of the syntax should be mentioned, although it does not carry figured decoration. Strictly speaking, the band of vine leaves is part of the sarcophagus lid, which most resembles a temple roof. The top of the casket proper is decorated by a continuous fascia carved with a maeander pattern, that may be considered either part of the frame of the box or, with the lid in position, as the architrave of the structure. In this latter case, it would resemble the decorated architrave of several buildings in Asia Minor: the Archaic, Doric, Athenaion at Assos; the late 6th c., Ionic, Didymaion; the 4th c., Ionic, Nereid Monument at Xanthos. (Cf. ills. 11, 12 and fig. 14.) These examples carry figured decoration rather than a continuous pattern. It has also been suggested, however, that the maeander has its own symbolic meaning, perhaps alluding to the labyrinth; for a recent discussion of the motif, from Karian Labraunda, see Gunter 1995, 4451, Cat. no. 18, esp. 4951 and n. 169. The Labraunda

fragments, from two or more friezes, incorporate figural elements within the key pattern: human ears, double axes, and one (preserved) shield. Both the double axe and the ears are appropriate to Zeus Labrandeus, and therefore carry specific local meaning, but the date of the friezes is late (probably Augustan or late Hellenistic) and their original position unknown.

3. The original suggestion that the "Altar" is the Heroon of Telephos is by Stähler 1978; for a full discussion of the monument, see Webb 1996, 6166; for a somewhat excessive reconstruction with free-standing figures, see Hoepfner 1996a, 1997. On the Halikarnassos Maussolleion, see *supra*, ch. 1 n. 50.

4. For a strong endorsement of pattern books circulating not only among workshops, but also from one type of artisans' guild to another, see, albeit in another context, Billot 1994, 33. This common iconographic repertoire would tend to support my contention that the sarcophagus, although Sidonian and invisible to the general public after burial, can serve our purposes in identifying meaningful components of a *Greek* building.

For the "un-historicity" of the Battle side, see Ridgway 1982; and cf. the statement attributed to the painter Nikias by Demetrios *On Style* 76 = Pollitt 1990, 171: that a painter should choose vast subjects, like cavalry battles, with horses galloping, being reined in, crouching down, and many men throwing spears or falling off their mounts; and that "this principle was a part of the painter's art in the same way that the legendary stories were part of the art of the poets." Andrew Stewart points out to me that the battle encounter meaningful to Abdalonymos was Issos, after which he was chosen king and which therefore should be depicted on his casket. The fact that generic iconographic patterns were, however, used to represent it confirms that conventionalized motifs could signify specifically in a particular context, as I shall argue for certain forms of decoration on some Greek buildings.

One of the pedimental compositions on the Alexander sarcophagus has been considered historical and specific: the murder of Perdikkas. The issue is extensively discussed by Stewart 1993, 301304. Admittedly, the killing of a warrior by apparent members of his own entourage seems to fall outside all possible generic interpretations; yet I am not convinced that the issue would have been of special interest for Abdalonymos and his subjects, and would have ranked inclusion in as prominent a place as a gable, usually reserved for exploits of the dynast himself.

5. On the traditional meaning of Lykian sarcophagi, see, e.g., Childs and Demargne 1989, 25455; Demargne 1973; Demargne and Coupel 1974, 6885, 12122. Although even these elaborate caskets reproduce architectural forms, they cannot be considered here because they reflect typically indigenous (wooden) structures, without Greek overtones.

Several of the details (primarily the use of the axe) that had puzzled me in my analysis (Ridgway 1990, 42) of the Hunt side on the Alexander Sarcophagus are explained by Bruno 1992, 159 and n. 31, in terms of the Meleager Hunt as established in vase painting and as echoed in the mural of the Royal Tomb ("of Philip") at Vergina. For a hypothetical reconstruction of an original painting illustrating the myth, see Kleiner 1972, esp. fig. 6 on p. 17, and cf. n. 12 on p. 42.

6. On griffins, most recently and briefly, see *LIMC* 8, Suppl., s.v. Gryps, pp. 60911. Atargatis: Stewart 1993, loc. cit., although the item is not mentioned in the entry of *LIMC* 3, s.v. Dea Syria/Atargatis. Sirens: Smith 1991, 191. Isis: Schefold 1968, 11 and n. 7.
7. Hersey 1988; although this book has not attracted the attention it deserved from Classical archaeologists, see the ultimately sympathetic review, by D. Clarke, in *Architecture* (Aug. 1988) 3942. Hersey points out (p. 2) that the vision of the temples he advocates "may not have been established until the 1st c. B.C. or so," in keeping with his reading of Vitruvius. For "Sacrificial terminology in architecture" see esp. his pp. 2143.

8. Only the modern Greek term is given in Ginouvès and Martin 1985, 182, s.v. oves; it would therefore seem that there is no ancient equivalent; cf. Ginouvès et al. 1992, 115, for the triglyphs. For other dictionaries of architectural terms, although with a more limited scope, see Hellmann 1992, and Curl 1992.
9. The quotation is taken from Scully 1962, p. 1. For a fair review of the hook, see, e.g., Thompson 1963.
10. Vitruvius' imagery is accepted by Onians 1988, who not only believes in the intentional allusion to a forest of trees, in a derivation from wooden prototypes, but also suggests that Euripides and his contemporaries saw the Doric colonnade as a series of robust soldiers, surrounding a temple like a phalanx (p. 8). Further comments in the same vein: Onians 1995, esp. p. 35.

11. Bammer 1985, with reference to his earlier publications on the subject. See pp. 7477 for his description of the meaningful archaisms at Ephesos, p. 78 for his conclusions, p. 81 for the formulation of the general theory; ch. 8, pp. 7987, discusses the layering in architecture and in society; his table of forms is on p. 105.
12. For a chronologically nuanced discussion of the orders along political lines, see Rust 1993, esp. 103104 and ns. 911 for bibliography and comments on the Athenian Stoa at Delphi; various possible motivations for the adoption of specific orders are tabulated on p. 110. Contra, McGowan 1997, esp. 23031 ns. 9799. To be sure, the use of Pergamene capitals for the inner colonnades of the Stoas of Eumenes II and Attalos II in Athens was a clear allusion to the donors and helped to advertise the source of the benefaction. See *infra*, ch. 6 and n. 38.

13. That this position is not too radical can be supported by the fact that others can consider figural sculpture (pedimental, metopal, in friezes) as just an-

other degree of architectural embellishment "anthropomorphic decoration." See Altekamp 1991, Section 6.1.1, pp. 17375 and esp. n. 747. In a wider perspective, figural terracotta ornaments, although not *carved*, should also be included. See infra.

14. The guilloche motif exists in Mesopotamia since Early Dynastic times (3rd millennium B.C.E.): Frankfort 1970, 252; for Assyrian examples, which may be the ultimate source for the Greek Orientalizing patterns, cf. his fig. 218 on p. 194. Note that the North Porch of the Erechtheion emphasizes the corner columns by making the strands of the guilloche concave rather than convex, as in the adjacent bases, and thus underscoring that a visual message was inherent in moldings; the bases of the east façade, by contrast, are plain (cf. ill. 5).

15. For a discussion of Archaic *columnae caelatae*, see Ridgway 1993, 38587, 405 ns. 9.1618, with bibliography; for convenient illustrations, see Boardman 1978, figs. 217.15 (Ephesos), 218.1, 219 (Didyma), 220 (Kyzikos). The existence of carved pedestals in the Archaic Artemision at Ephesos has been recognized only in relatively recent years: Boardman 1978, fig. 217.6 should be assigned to one of them; cf. Ridgway 1993, 406 n. 9.19, 407 n. 9.22; Muss 1994. For carved drums below capitals, see, e.g., Bingöl 1990a; Webb 1996, 5253, figs. 69 (Smintheion), and new reconstructions of the Artemision at Ephesos in Bammer and Muss 1996, 5657, figs. 6364.

Whether some Archaic moldings with pendant leaf belong to column bases, e.g., at Old Smyrna, is still being debated: cf. Mertens 1993, 156 and ns. 644, 646; Schiering 1989, 37273 and n. 86 (although the fragments from Pyrrha here published seem to be from capitals: p. 374). The form may derive from furniture and work in metal or wood, although this derivation does not render it meaningless.

16. This illuminating statement is made, with regard to plays and literature, by Zeitlin 1994, 174 and n. 74. One of my reviewers refers me also to Garner 1990. Similar tendencies in sculpture in the round are explored in Ridgway 1997, 366 and *passim*, but the phenomenon of "visual citations" in ancient monuments has not yet been investigated as fully as it deserves; some important comments are made by Fullerton 1997.

On the Classical Artemision, see Ridgway 1990, 2830, with bibliography; Boardman 1995, figs. 23.14; Webb 1996, 1617; Bammer and Muss 1996, fig. 64.

17. On Hellenistic Didyma, see, most recently, Webb 1996, 104105. This structure also took a long time to build and was never completely finished; the decoration of the bases may therefore be as late as the Roman period. One form of embellishment consists of facets or panels along the bottom torus, each containing a different motif; these are mostly floral, but one depicts a Triton carrying a Nereid (cf. fig. 4) and must therefore have had specific meaning.
18. Latest discussion of the Smintheion: Webb 1996, 5254, with bibliography.

19. A possible exception to this statement are the stylopinakia of the Temple of Queen Apollonis at Kyzikos (*supra*, ch. 1 n. 33), but these may be poetic fantasy. Four relief Nikai seem to come from the inner columns of the (Hellenistic)

west stoa in the Agora at Magnesia, but their original location is unclear: Webb 1996, 9293 and n. 47. Piers (rather than columns) can occasionally be carved with figures: see, e.g., those on the upper gallery of the late 2nd-c. Bouleuterion at Sagalassos, in Pisidia, where Athena and Ares appear with prisoners crouching at their feet: Webb 1996, 13031, figs. 104105, and, for colored photographs, *Archaeology* 48.3 (May-June 1995) 29 (text on p. 32).

20. According to the definition given in Winter 1994, p. vii, an anthemion is a floral chain pattern; Ginouvès and Martin 1985, 17879, s.v., specify that its primary form is as a linear alternation of lotus flowers and palmettes, although they consider other possible combinations; frequently, however, the term is used for any type of floral ornament or finial, even outside the links of a chain.

21. See Ridgway 1993, 38687 (and cf. 1977, 26). I do not mean to imply that a gradual transformation from wood to stone took place in Greek architecture, as stated by Vitruvius. But wooden posts were certainly a feature of some early temples (e.g., the 8th/7th cs. phases of the Samian Heraion), and may have been imitated at the first Athenaion at Marmaria, Delphi, given the very narrow diameter of the shafts implied by the extant stone capitals; yet preserved fragments show that the shafts were in stone, and had 16 flutes: *GdDs* 1991, 58. See also Altekamp 1991, Section 6. 15.1, pp. 29196, with bibliography, for a skeptical review of the possible use of moldings in wood and bronze before stone; but cf. also Drerup 1952, Pedersen 1983 (on anthemion collars in general, but esp. p.117, with a comparable theory of origin), Kyrieleis 1988, and Ridgway 1993, 305, 337, 379, with additional bibliography on metal ornaments in architecture.

The Samian sequence of temples has recently been revised, and previous nomenclature (e.g., Polykrates' Heraion) is being discarded: see Kienast 1992.

22. On Metapontion, see Mertens 1979; on Naukratis, Dinsmoor 1950, 126 fig. 47. All other examples are listed by Lehmann and Spittle 1982, 10612, and esp. ns. 7778 on p. 107.
23. On Classical and Hellenistic anthemion collars, see Lehmann and Spittle (previous note). On the revival movements in the 4th c., see Ridgway 1997, 366 and passim; see also Meritt 1996, 138, for architectural "revivals" under Lykourgos; on the new arrangement and name of the "Temenos," see *JHS-AR* 4 (1995) 5253, and *JHS-AR* 43 (1997) 91.

24. There is an extensive bibliography on Karyatids and Telamones. See, e.g., the many mentions in Ridgway 1990, 17680 with notes, and, for the Archaic period, Ridgway 1993, 14748, 156 n. 4.8, and *passim*. Add Lloyd-Morgan 1990, Wilson 1990, 6971; Scholl 1995 (with specific discussion of the Erechtheion porch), and cf. *infra*, ch. 5, for a discussion of meaning. For the relief Karyatids of the Memmius monument, see Webb 1996, 8283. Terracotta Telamones were found within a large private house of the 2nd c. B.C.E. at Fregellae, Italy, during Summer 1995. For those on the Akragan Olympieion, see, e.g., Boardman 1995, fig. 164. Telamones are known from literary descriptions (*Athen.* 5.4044) to have adorned the Syrakosia, the luxury boat that Hieron II of Syracuse sent as a gift to Ptolemy IV; 2nd c. B.C.E. limestone examples were found in Pojan (ancient Apollonia), Albania: Prifti 1986, with illustration on p. 26.

25. Mid 4th-c. Karyatids occur at the Heroon of Perikle, a Lykian ruler, at Limyra (cf. ill. 34), but they cannot be considered properly Greek although they imitate the Erechtheion "Korai" (see Boardman 1995, fig. 221.1; Ridgway 1997, 9899, with bibliography). A gap in popularity comparable to that of the anthemion collars could therefore still be maintained.
26. For Roman examples, see, e.g., the Captives' Façade at Corinth: von Hesberg 1983, whose Augustan date for the initial phase may be too early, although it is supported by Schneider 1986, 12830 (pl. 37.2). See also *infra*, ch. 5. The Seven Dwarfs at Burbank are illustrated by Galiński 1992, 29, fig. 27a; see his entire first section, on "Classicism in post-modern American Architecture" for other examples of classical forms introduced into contemporary buildings, and consult the short bibliography on p. 52.

27. Carved Doric capitals: Barletta 1990, 4552, with distribution map, fig. 2 on p. 47; besides floral rings carved on the hypotrachelia, see also the lotus flowers carved directly on some Doric echinoi of the Basilica at Paestum: Koenigs 1972; Mertens 1993, 6772, figs. 5457. Ginouvès et al. 1992, 102103, list figured capitals, and include the Doric examples from the Monument of the Bulls at Delos: 103 n. 369. Hybrid forms occur both in the Archaic and the Hellenistic period: e.g., half Doric, half Ionic capitals at the 6th c. Amyklaion at Sparta (cf. Faustoferri 1996, pls. 12), and Doric echinoi carved with egg-and-dart at the 2nd c. Bouleuterion at Miletos. These mixtures are however non-figural, and if they carried an ethnic meaning, we can no longer comprehend it.

It could, of course, be argued that even without carved decoration the Doric capital expresses a message: with its spreading echinos and strong abacus, it visually cushions and distributes the stress of the entablature onto the shaft, just as upward stylobate curvature and column entasis convey the tensions and reactions of all architectural members to the load.

Ionic capitals: Attic and non-Attic varieties, with their peculiarities, have been most recently discussed by Meritt 1996, who stresses regional as well as chronological variations, and the initial Attic preference for painted rather than carved ornament.

28. On the Aiolic capital, or even the entire "order," see Betancourt 1977. Cf. Ginouvès et al. 1992, 92, and, for leaf capitals in general, including Pergamene, 99-102. On the political implications of the Pergamene capitals, see *supra*, n. 12.

29. Smith Hall-Playmakers Theater: Allcott 1986, 3543; for this reference and photographic help I am deeply grateful to Prof. M. C. Sturgeon, who first attracted my attention to these capitals. On the Berkeley campus, note the Corinthian capitals of the Doe Memorial Library (built 19071911, 19141917), where the central spirals have been turned into snakes supporting an open book, in allusion to Athena, goddess of wisdom: Partridge 1978, 26. The author adds that for the architect of the building, J. G. Howard, the "efflorescent" character of the Corinthian order also symbolized dissemination of knowledge, while the mixture of Ionic and Corinthian on the same façade alluded to the Doric-Ionic combination of the Parthenon, making of the Berkeley campus the new akropolis of the "Athens of the West." I am indebted to Prof. C. Greenewalt for the knowledge of Partridge's work.

30. I owe this reference and my quotation to Brian Burke, of the Germantown Academy. The article by Van Brunt, "Greek Lines," appeared in the *Atlantic Monthly* 7 (June 1861) 65467, and 8 (July 1861) 7688; its overly florid tone was revised in a republication of the text in 1893. This information is derived from Coles 1969.
31. Alberti: the quotation, from his *De re aedificatoria* 7.6, is taken from Onians 1990, 3.

32. It has even been surmised that it stood as an aniconic representation of Apollo Agyieus: Yalouris 1970, but *LIMC* 2, s.v. A. Agyieus, p. 330 no. 29, lists the Bassai column among uncertain identifications, and I find it difficult to accept this theory. On the vegetal forms of A. Agyieus, however, see Fehrentz 1993. On Vitruvius' use of the term Corinthian not as an ethnic but as a compositional designation, see Schark 1996. Korres 1994, 64 and fig. 11 non-committally reproduces a reconstruction by Pedersen 1989 (*non vidi*) that would place the earliest Corinthian capitals on the four columns of the western room in the Parthenon. For the possible sacred connotations of the Corinthian order, see also Pollitt 1986, 24749.

33. Tholos at Delphi: see *infra*, ch. 3. Epidaurus Tholos: Ridgway 1997, 4245 with previous bibliography. Onians 1988, 1921, stresses the meaning of such interior use as the Peloponnesian answer to the Athenians' comparable use of the Ionic order; both Ionic and Corinthian would have been considered appropriate for internal use because of their "feminine" character (women stay indoors, the men go out), but the Corinthian capital was preferable because free of racial overtones (p. 20).

Internal Corinthian columns tangent to the cella walls and forming a *H*-shaped frame for the chryselephantine cult image have been postulated for the Asklepieion at Epidauros: Roux 1961, 84130, esp. 90. Given the small size of the cella, these supports were not structurally necessary to reduce the ceiling span, and can therefore be considered purely ornamental/symbolic, perhaps alluding to vegetation and rebirth. Regrettably, no remains of the capitals exist.

34. See Frazer 1990, esp. 21827, for a discussion of the "bilingualism" of the building; the quotation is from p. 226. Note that no wall surrounded the sacred area, so that a gateway served no practical purpose. Its date and attribution are provided by (fragmentary but safely completed) inscriptions over both façades. The plan is supposedly inspired by a similarly bilingual, and only slightly earlier, propylon at the sanctuary of Asklepios at Epidauros, but with modifications (cf. Frazer, figs. 9394 on p. 144 for both plans; at Epidauros, both prostyle façades are Ionic, only the interior columns are Corinthian and, above a plain frieze, carry a molding decorated with boukrania and phialai). The intent of the differing orders, however, may have been comparable in both cases.

Another instance of two different orders being used within a single gateway occurs in the Athenian Propylaia (dated 438/432). Rhodes 1995, 54, would read also the Athenian structure as an architecture of transition "from profane to holy" and stresses the symbolic, "processional" meaning of the Ionic columns in the interior of the west porch, in contrast to the Doric order of the

façades. Yet the practical advantages of using the Ionic order in a split-level building may have influenced Mnesikles' choice: cf. his pp. 6869.

35. Asia-Minor vegetation goddesses: Webb 1996, 3 33. Bust capitals: Ginouvès et al. 1992, 9798, and for variation in standard Corinthian, his pls. 4950. The main compilation of figured capitals remains von Mercklin 1962. Messene capitals: Themelis 1994, 162, pl. 54a-b; cf. Lauter 1986, p. 268, pl. 36a-b. For an Ionic example from Herakleia Minoa, see von Mercklin 1962, no. 178 fig. 337, and cf. no. 169, fig. 300, for a "mid 4th-c." Corinthian example from Selinous; figs. 21379, nos. 11868, show Tarentine examples, grouped by type of representation. Fischer-Hansen 1993, 7072, believes that figured capitals with groups or female protomai were developed in Taras during the 4th-3rd c. and from there diffused all over Apulia and Campania, and even Etruria. See also Carter 1975, 76, no. 225, pl. 42c, for a "narrative" image on a Tarentine capital: a draped female between akanthos volutes being lifted by an eagle and identified as Thalia. For the composite capital from the Baths

of Caracalla, see, e.g., *LIMC* 4, s.v. Herakles, pl. 491, no. 683.

36. Mahdia Chimaera capitals (and discussion of other examples): Heimrich 1994, with distribution list on p. 227; other early examples in Greece are found at Eleusis. The marble candelabra are also represented within the Mahdia cargo, and are discussed by Cain and Dräger 1994.

37. The statement on the Hellenistic corpus is taken from Frazer 1990, 182; that the griffins cannot be "a mere decorative *topos* at Samothrace" is stated on his p. 189, after a long discussion of possible meanings for the creatures. Dr. Webb tells me that two more figured sofa capitals (2nd c. B.C.E.) occur in the theater at Magnesia: Webb 1996, 8889. For the Didyma capitals, see, most recently, Webb 1996, 104105. On Archaic figured examples, see von Mercklin 1962, 40, nos. 101102, figs. 16265 (from Tegea [with a Triton]; and from Slavochori near Sparta [Herakles and the Hind], respectively); for the type in general, cf. Barletta 1990, 5255, with distribution map fig. 9; Ginouvès et al. 1992, 10810.

38. For this description, see, e.g., Dinsmoor 1950, 193; more detail in Stern 1988, and esp. Stern 1985 (the metal supports to hang round objects, presumably garlands or phialai, mentioned on p. 411, were probably added in the early Augustan period), with col. pl. 96. The eyes of the guilloche on the capitals of the east and west façades may have been painted, thus resembling the capitals of the North Porch; yet, since the latter were painstakingly hollowed out to be filled with glass insets, the total effect must have been different enough to warrant the extra effort. This greater elaboration is matched by the two different versions of the guilloche pattern carved on the upper torus of the North Porch bases.

39. Decoration on the balteus of the baluster side: e.g., Ginouvès et al. 1992, 8990, pl. 46.I-5. For reference to human heads between palmettes in Sicilian Ionic capitals, see, e.g., Wilson 1990, n. 20 on p. 87; cf. *supra*, n. 35 (von Mercklin 1962). Faces in volutes occur first in different media: as part of the handles in large South Italian volute kraters, and on the same shape in metal e.g., the famous Derveni Krater.

40. Floral ornaments in the canalis at Samothrake: Frazer 1990, 15767, with mention of other examples elsewhere; cf. his pp. 16871 for discussion of the floral balteus on the Samothrakian capitals. Pergamene Ionic capital with thunderbolt on baluster side (the only one with this motif recovered from the monument so far): *Pergamon* 1996, 96, Cat. no. 31.
41. See McGowan 1995, who suggests that the funerary columns of the Archaic period were meant to evoke the Age of the Heroes.
42. For comments on such painted walls, see Ridgway 1993, 358 n. 8.7, and 407 n. 9. 21, with bibliography; add Junker 1993, 163 and n. 987. *Flat* decoration of walls is also treated by Altekamp 1991, 37578 (Appendix 8.1). The polychromy of Greek temple walls is discussed in ch. 4 infra.

43. This subject has been most extensively treated by Philipp 1994; but see also Ridgway 1993, 337, 35960 n. 4.10 (albeit discussed as metope appliqués).
44. Chios and Sardis shrines: Ridgway 1993, 387; Prinias dado (according to Beyer): Ridgway 1993, 38082; for other possible examples (from Myus, Iasos, and other sites): Ridgway 1993, 404 n. 9.15 with bibliography, esp. with reference to H. Philipp (*IstMitt* 1989). Prinias stele imbedded in built tombs: Ridgway 1993, 23031; see also Hübner 1994, who advocates a similar architectural function for a relief from Paros and other examples, but identifies them as belonging to "sacred houses." Heroon of Perikle at Limyra: Ridgway 1997, 9499; Boardman 1995, 191.

A wall frieze with figures running across joins decorated the interior of the (ca. 300 B.C.E.) Monument of the Bulls on Delos, but this was an anomalous structure: see, e.g., Ridgway 1990, 17275; Webb 1996, 13436.

In the late Hellenistic period, there is evidence for a form of decoration consisting of sizable half-figures in stone that were presumably fastened to a wall background; some are from Delos, others have been recovered from the Mahdia wreck: Marquardt 1994. They belong, however, with the various types of monuments meant as a *trompe l'oeil*, rather than with architectural sculpture.

I am uncertain how to classify carved balustrades, like that decorated with weapons and spanning the intercolumniations of the upper story of the stoa in the Precinct of Athena at Pergamon (on which see Webb 1996, 5759), or the Nike Parapet, less closely integrated into a specific building but certainly thematically connected with the Nike Temple: see ch. 3 on how to "read" it as part of the total program. Fragmentary slabs from another balustrade, with mythological subjects, have been traditionally assigned to the upper level of the Propylon to the Temenos of Athena at Pergamon (cf. Webb 1996, 6061 ), although Hoepfner 1996c, 24 and fig. 17, would rather place them between the columns of the second story of the large peristyle in Building V, the royal palace of Eumenes II.

45. Tholos at Delphi and Halikarnassos Maussolleion: see Ridgway 1997, 4245 and 11235, for extensive discussion and bibliography. Telephos frieze: new reconstruction and arrangement of the surviving slabs in *Pergamon* 1996. Hoepfner 1993a, 118, states that the location of this frieze corresponds to the embellishment on the walls of the royal andron at Pergamon, just as the inner peristyle of the "Altar" recalls the palace peristyle; but the promised fuller argu-

mentation (in Hoepfner 1996c, esp. 1726 and 41) does not provide, in my opinion, sufficient supporting evidence, as perhaps also implied by Kunze 1996, 12223. Cf. also the ca. 370 Heroon at Trysa for figured friezes decorating both the outside front and all four inside faces of the precinct wall surrounding the central court, which however is not part of a structure proper: Boardman 1995, figs. 221.111 ; Ridgway 1997, 8894.

The Temple of Artemis Leukophryene at Magnesia (ca. 150) had screen walls between antae and columns of both porches; they were topped by a frieze carved with garlands suspended from deer's heads, rather than from the more common boukraniaa clear example of a traditional form being adapted to a specific deity: Webb 1996, 90 and fig. 52.

The Maussolleion and the Nereid Monument at Xanthos also had figured friezes crowning the podium on which the temple-like superstructure stood, but these cannot be considered wall decoration, and may rank rather as glorified moldings. Note that Hoepfner 996b, 10610, would place the Kentauro-machy frieze directly below the Amazono-machy one atop the Maussolleion podium, thus increasing its similarity to the Nereid Monument; he also places the Chariot frieze in the interior of the burial chamber: cf. his fig. 12 on p. 109. See also *supra*, ch. 1 n. 50.

Continuous friezes surrounding prostyle or in-antis arrangement (e.g., as on the Nike Temple and even the Parthenon on the Athenian Akropolis, the Nereid monument) cannot be considered wall decoration, since they run above columns on façade or short sides, even if they crown blank walls on the long sides.

46. For an imaginative reconstruction of the interior of the Tegean Athenaion, see Stewart 1990, fig. 541.
47. This theory is by Schädler 1990, who gives the alleged pattern code of the various moldings on p. 365, fig. 2; for my objections, see Ridgway 1992, 212n. 30. For a detailed analysis of the floral ornament on the Erechtheion, see Altekamp 1991, 6269.

48. The observation on the common decoration is by Büsing 1990; see esp. his p. 72 n. 7 and figs. 56 on pp. 27375; the anta profile is also the same in both buildings, but one doubts that this detail would have caught the attention of the casual viewer. Further relationships between the two structures (as listed by Rhodes 1995, 43, nos. 57) emphasize that both temples were dedicated to Athena. I am increasingly skeptical that the building presently known as the Erechtheion was in fact also a temple to Erechtheus, and find much of value in Robertson 1996, 3744, although I cannot accept all his theories. I have, nonetheless, retained here the traditional name of Erechtheion to refer to the Temple of Athena Polias on the north side of the Akropolis, in order to avoid unnecessary complications.

49. Altekamp 1991, 30810, Section 6.17, on the role of the leaf molding as signifier in the 6th and 5th cs.; see also his Section 6.9, pp. 26869, on objective meaning and symbolism, and his synthetic statement, p. 371 (6.17). He would however accept that such moldings had a non-Doric ethnic identity (p. 308). We have already mentioned (*supra*, n. 11) Bammer's theory as to the value of moldings to convey societal stratification.

50. For this point, difficult to express, see the excellent explanation by Carpenter 1962, 23437 and fig. 54. Altekamp 1991, Section 6.1.6 and ns. 77475 on pp. 8586, cites other authors on this subject; in his summary statement on p. 366, however, he maintains that the connection between specific leaf patterns and specific profiles was remarkably loose during the 6th c., and that a prescriptive linkage was established only later, as a secondary development, not as a genetic one.

51. See Altekamp 1991, Section 6. 12, pp. 28085, for a discussion of Aiolic as a non regional-specific form, and other mixtures. Ethnically distinctive seem to me the Archaic moldings on Chios, which often add carved motifs to the convex surfaces of egg-and-dart or Lesbian-leaf courses, and are used in combination with lion's paws for anta bases, thus lending to Chian architecture an animistic effect: see Boardman 1959, esp. pls. 29c (gorgoneion with palmettes on egg-and-dart) and 33 (lion paws).

52. Decorated architraves: Ridgway 1993, 38990, 409 n. 92.4. For the Nereid monument, see Ridgway 1997, 7988; Boardman 1995, 19091, figs. 218. 116. A recent reconstruction of the Archaic Didymaion would place the lions and the corner gorgons on a frieze course, above corner gorgons at the architrave level: Schattner 1996, figs. 19a-b. This theory is based on a newly found block, but the suggested superimposition of images seems awkward. It would, however, explain the presence of fasciae behind one corner gorgon, as contrasted with the plain background of the other extant sculpture.

53. On Hellenistic weapon friezes, see, e.g., Lyttleton and Blagg 1990; Webb 1996, 33, 5759. Stone shields decorated the outer walls of the Bouleuterion at Miletos, alternating, below capital level, with the engaged Doric columns of the main structure (see Webb 1996, 33, 102). Dr. Webb tells me that similar relief shields occur on other bouleuteria, for instance, that at Sagalassos (her p. 130, fig. 106); she too thinks of a possible inspiration from captured weapons hung on temples.

54. Archaic Kykladic entablatures: Gruben 1993. Delphic Treasuries: Ridgway 1993, 39295 and ch. 9, *passim*, for discussion of the various examples of Archaic figured friezes. Terracotta plaques: Mertens-Horn 1992. Metapontion Temple: Mertens 1979. On dentils in combination with friezes, see *infra*. Note that the ancient Greek word for a frieze is *diazoma* or *zone* (belt); the word *zophoros* (carrier of figures) is modern (Ginouvès et al. 1992, p. 115) or perhaps only Roman (cf. Vitr. 3.5.10). Another term, occasionally used for a flat band course, is *tainia* (ribbon): pp. 112 and 114.

It could, of course, be argued that terracotta revetments, no matter how colorful, should not be considered "sculpture." I shall however count them as long as they are in relief, whether or not mold-made, and carry other than purely geometric/abstract patterns.

55. Even the most "monotonous" of continuous friezes can, however, carry specific allusions: see, for instance, the frieze of the upper level of the propylon to the Temenos of Athena Nikephoros at Pergamon (ca. 180 B.C.E.), where boukrania supporting garlands alternate with eagles (in reference to Zeus), and owls (in reference to Athena) appear above the festoons in alternation with

phialai: Webb 1996, 61 and fig. 21; cf. also her pp. 2021 for discussion of Hellenistic continuous friezes in Asia Minor.

56. See the list of terracotta metopes (and friezes) in Conti 1994, 72 and ns. 10910; cf. also Ridgway 1993, 33537, 34749; and Ridgway 1997, 68 n. 47, for a problematic example from Olympia tentatively attributed to the 4th-c. Met-roon.

57. Archaic decorated triglyphs in the Peloponnesos and Magna Graecia: Barletta 1990. Stoa of Antigonos Gonatas on Delos: Ridgway 1990, 172; Webb 1996, 13637, figs. 11718; Schmidt-Dounas 1994 advocates a political meaning for the 48 bulls' heads which would be symbolic of the Macedonian territory and control over the Aegean. Eleusis Lesser Propylon: Mylonas 1961, 58, fig. 57; cists and sheaves of wheat are carved on the triglyphs, boukrania and stylized poppy flowers decorate the metopes of a Doric entablature running over Corinthian columns. The building was vowed in 54 B.C.E. by Appius Claudius Pulcher, but was erected and completed after his death. G. Roger Edwards has kindly called to my attention a Doric frieze now im-mured into the Little Metropolis Church in Athens, supposedly from the Athenian Eleusin-ion; the preserved section shows two metopes carved with phiale and boukranon respectively, framed by triglyphs ornamented in relief with

crossed torches and poppies, and with a plemochoe: Brommer 1980, 548 and fig. 2 on p. 547; cf. a drawing in DarSag s.v. Eleusinia, 570, fig. 2638. The date of this frieze can no longer be determined by context, but seems later than the example in Eleusis.

58. Apulian Loutrophoroi, in New York:  
*MMA Bull* 53.2 (1995) 12, with color ill. The Amazons within the metopes are clearly recognizable because of their peltas.

59. On the apparent absence of the dentil course in Asia Minor until the 4th c., see Bingöl 1990b, who discusses the Sinope stele and cites the Xanthian Nereid Monument (ca. 380) as the first Asia Minor example of dentils, albeit without the continuous frieze. On the propylon to the "Temenos," see Lehmann and Spittle 1982; Ridgway 1990, 2628; Ridgway 1993, 45455, and n. 21 on pp. 46768, with bibliography; also *supra*, n. 23. To be sure, some of the large Archaic temples of Asia Minor, like the Didymaion and the Ephesian Artemision, have been restored on paper with a dentil course, but actual archaeological evidence seems lacking.

60. Tholos at Epidauros and Priene Athenaion: see Ridgway 1997, 4548 and 13540. Belevi Mausoleum: Ridgway 1990, 18796, esp. 19596, pls. 8994. On decorated coffers in general, see Tancke 1989, Webb 1996, 2223.

61. On terracotta "friezes," in whatever position, see Ridgway 1993, 37879, 38384, and ns. 9.47 on pp. 401402, with additional bibliography. See also Mertens-Horn 1992. Soffit of Hekatompedon raking cornice: Ridgway 1993, 284; Dinsmoor 1950, 7172; this example may also be considered marginal in terms of "sculpture," since it is only engraved and not in actual relief; but the motifs are figural and occur on stone slabs, which therefore imply deliberate incision, if not true carving. For early decoration of geison soffits, which may imply a different conception of the roof as a virtual lid (the Temple of Athena at Paestum had *coffers* in that position [ill. 14]), see Ridgway 1993, 301.

62. A fragmentary temple model in terracotta, found on the bed of the river Eurotas in Sparta, shows a tiled roof and a pediment with a gorgoneion painted in its center, thus leading to speculation that Archaic Lakonian naiskoi may have carried similar painted decoration: Catling 1995, esp. 322. At present, gorgoneia (in relief) are attested only from Sicily, whereas other areas show the full Gorgon, occasionally even included in disk akroteria (cf. his n. 19).

63. Lion waterspouts derived from Egypt: Ridgway 1993, 36 and n. 42 on p. 53; see also 248 n. 6.8 for bibliography on the general type. Mainland Greece tended to have lion-head spouts only at the four corners of the building; Magna Graecian structures used however uninterrupted series of spouts along the flanks, which were in turn adopted by the Greek mainland after 480. Seals of Phokaian Larisa: Kjelberg et al. 1940, 11314, pls. 5758; Winter 1993, 242. Artemision at Epidauros (early 3rd c.): e.g., Ridgway 1990, 150. Ram heads at Eleusis (not pierced for spouts, however): Mylonas 1961, 80, 81, fig. 21. Thermon antefixes: Winter 1993, 11033, esp. 114 and n. 14, 13132, pls. 5456. The only other example of human heads (satyrs' masks?) as waterspouts known to me is from the hybrid Temple of Hermes from the upper market on the Pergamene akropolis: a tetrastyle prostyle building with Doric capitals on Ionic shafts and bases: Schrammen 1906, 10818, esp. 110, pls. 30.2,

3334. This publication accepts, with some hesitation, a 2nd c. B.C.E. date ("the same builder as the Altar's") and the title "Temple of Dionysos" but a reconstructed corner on display in the Berlin Museum is labeled "Temple of Hermes." See also Rumscheid 1994, vol. 2, 5758 Cat. 213, pls. 126.4, 127.1 Ephesos parapet: e.g., Ridgway 1993, 38889 and esp. n. 9.23 on pp. 407408, with bibliography (the suggestion of a possible gable on the west [front] side is due to U. Muss, *ÖJh* 1986). See now Muss 1994.

64. Siphnian Treasury sima with walking lions: e.g., Ridgway 1993, 299 with bibliography in n.
43. This monument is also cited by Danner 1993, together with other Etruscan, Paestan, and East Greek examples partly in relief and partly in the round, projecting above the level of the sima; he argues that such corner figures appear on architrave, frieze, sima, and kymatia, but he includes the variously classifiable Didyma Archaic gorgons and the winged-horse protome from Thasos in his list. For a Hellenistic terracotta example (a figure seated on a rock), see Danner 1994.
65. Sima from Argive Heraion: see, e.g., Boardman 1995, fig. 7; for the entire building, see Ridgway 1997, 2530, with bibliography.
- Messene relief terracotta sima: Themelis 1994, 15564 (2nd c.; symbolic meaning), fig. 19a-b, pl. 53b-d.

66. On human-head antefixes, see Winter 1978. Thasos series with Bellerophon: Launey 1944, 3944, pls. 89; Winter 1993, 25657, pls. 104105 (ca. 550). Satyrs and Nymphs: Mertens-Horn 1991. For a group composition (satyr attacking Nymph), perhaps as an antefix, unusual for Olympia although known from Italy, see Moustaka 1993, 4655, pls. 4046. Naxos satyrs: Pelagatti 1965. Gela satyrs: Orlandini 1954. Morgantina gorgoneia and lion-skins: Kenfield 1990, pl. 45c-f; Kenfield 1993, 26668, with hints of political connections. Troy antefixes with helmeted Athena: Miller (Collett) 1994, pl. 84. On the subject, in general, see *EAA* I, s.v. antefissa, pp. 404407 (A. Andren), and *EAA* Suppl. 2.1 (1994) s.v. antefissa, pp. 24252 (M. Mertens-Horn).

It has recently been shown (Lang 1996, 112) that during the Archaic period decorative roof terracottas could be used not only for temples, as usually assumed, but also for private houses on the Greek mainland.

67. Heraion disk akroterion: Danner 1989, no. 21 pl. I; for the solar interpretation, see Yalouris 1972, esp. 9397, and col. Beil. I. On group akroteria, see Wester 1969.
68. On akroteria in general, see Goldberg 1982, Danner 1989, also Webb 1996, 26. For the Magna Graecian horse-and-rider type, see Sze-liga 1981. Extensive bibliography on Archaic akroteria, in various media, in Ridgway 1993, 3035, with ns. 7.5560 on pp. 32731 See also Ridgway 1997, 3940, 5557, for the Epidaurian akroterion and other examples.

Cornice sculpture could be considered akroterial in some respects, since it stood out against the skyline. It occurred usually on heroa and tombs, like the Belevi Mausoleum (cf. ill. 21), or structures with a non-pedimented roof, like the Pergamon Altar. It could consist of griffins, horses, lions, and even human/divine figures. It is not specifically treated in this section because it does not belong to temples, and also because it partakes of the nature of sculpture in the round, which could be removed without altering the fabric of the structure. By contrast, a missing lateral or central akroterion on a regular roof would be conspicuous for its absence. On Hellenistic cornice sculptures, see Webb 1996, 2526.

69. This quotation is from Onians 1988, 89. The author is admittedly referring primarily to the Greek temple plan, and to the basic use of only two orders; yet even this conception is open to disagreement. Onians also states that only "minor refinements" provided variety: "otherwise, individuality and inventiveness were conspicuously lacking" (p. 11). I shall let the evidence speak for itself.

## Chapter 3

### Where:

### The Issue of Visibility

In the previous two chapters, we argued for the importance of architectural sculpture as public message, and for the vast range of it, since many elements of a structure, insofar as they carried decoration and could be considered meaningful, can be counted as such. It is now time to discuss the issue of visibility, in two forms: (1) how many of those finely devised ornaments—be they narrative or symbolic—were readily perceptible by the viewer? and (2) how many of them were meant to be read together, as part of a single program? We shall try to address these questions separately, although a certain amount of overlap between the two is inevitable.

## Visibility

Vitruvius obviously thought that decoration had to be seen. Expressing a peculiar notion, he stated (3.5.9-10) that if the frieze of a building had reliefs upon it, it had to be more sizable than the norm, not only in order that the sculptures be more imposing, but also because the eye had to "climb through thicker air" to reach it. We may not be concerned with such atmospheric strictures (even those of us who live in highly polluted cities), but we would agree that visibility is an important requirement of a public message. Yet we should also recognize that Vitruvius, for all his protestations of hands-on expertise, often describes plans and solutions (like the half-metope at the corner of a Doric frieze)

that do not correspond to actual ancient architecture, thus revealing himself an unreliable source for Greek practices.<sup>1</sup>

In terms of details of carving, even the assumption of intended visibility may be a modern construct. Peter Rockwell, a practicing sculptor who has studied in depth ancient monuments and techniques, is convinced that an artist might decide to perfect all parts of his design even when sure that no human eye could perceive them. The Column of Trajan would be such a workfinished up to the topmost convolutions, although no visitors could see that far, and possible lookouts on the roof of the adjacent Basilica and the two flanking Libraries would still not have allowed the complete inspection of the highest registers. Only today, with scaffoldings or casts, can all details be appreciated, and the import of each scene be misleadingly discussed as if they had been entirely visible to the ancient viewers.<sup>2</sup>

It is therefore reasonable to ask whether all, or even some, architectural sculpture was produced simply out of a sense of appropriateness what was traditional for a certain structure at certain levels and for a global effect of richness and ornamentation; or whether some areas were perceived as more accessible than others and were therefore given different content and perhaps even manner of execution. I shall immediately dismiss here the romantic notion, prevalent among some modern commentators, that the divine eye of the temple owner could see what was denied to the human eye, hence justifying the extra labor. The unfinished or roughly carved backs of many pedimental and akroterial figures, in my opinion, are sufficient witness to the contrary (ill. 20, contrast figs. 22-23).<sup>3</sup>

There are, to be sure, two different kinds of perception: the conscious and the unconscious, and even each of these depends on the observer's training. The unconscious type of perception may take in at a glance the capitals and moldings on a building, for instance, as a generic message, without need for close inspection, and we can safely assume that an ancient Greek would have been much more attuned to the presence of these elements than a modern observer, who does not expect them. Familiarity, therefore, engendered not only recognition, but also expectation; similarly, a trained artist is immediately aware of colors and forms that escape the non-artistic viewer until they are pointed out. This was a lesson I soon learned when I started teaching: I had to describe a structure or a sculpture before I could discuss it, because my freshmen would not immediately see what to me was fairly obvious.<sup>4</sup> I

therefore surmise that all *symbolic* architectural sculpture (in the wider extension of the term) relied on the ancient viewers' unconscious perception.

Familiarity is also a major element in the second type of perception the conscious. Modern television has fully exploited this psychological phenomenon in its commercials: at first an advertising anecdote is told in all its details, but after a number of showings, scenes and passages are eliminated, in the assurance that the audience, acquainted with the story line, will supply them automatically. Yet, no matter how synthetic eventually, such presentations must still retain a high degree of visibility. I would argue that all Greek *narrative* architectural sculpture, since it carried a specific message, was intended for conscious perception; it therefore had to be explicitly displayed. Yet ancient evidence is not always consistent on this issue.

The figured parapet of the Archaic Artemision at Ephesos (cf. ill. 4) was surely too high for comfortable perusal. We cannot tell, in its present fragmentary state, how each different topic was separated, if at all, from the next one, but it has not been suggested, to my knowledge, that each side of the temple carried a single theme, nor was it perhaps possible, given the length of the eaves. The subjects postulated so far, moreover, are too varied for single presentation: Trojan legends, Silenoi, Kentauroomachy, Gigantomachy, bird-monsters, even Persian dignitaries, at least to judge from the shoes. The parapet figures themselves were clearly smaller in scale than those on the sculptured drums and pedestals, which however could be seen almost at eye level. The distance of the balustrade from the viewer would have made the images appear even smaller, therefore less legible.<sup>5</sup>

A more obvious case of difficult legibility is represented by the coffers of the Belevi Mausoleum. This grandiose tomb, erected in the third century B.C.E. near Ephesos, presumably for Lysimachos but eventually used by Antiochos II in 246, had a podium topped by a Doric frieze with plain metopes, and an upper Corinthian peristyle that, according to the latest reconstruction, surrounded a walled and probably inaccessible inner court open to the sky. The Corinthian entablature was articulated into a three-fasciaed epistyle surmounted by a continuous anthemion frieze, a dentil course, and a sima pierced by lion-head spouts. The roof extending from the outer colonnade to the courtyard precinct wall supported (equine only?) corner akroteria, and a series of lion-headed griffins heraldically flanking large stone vessels (ill. 21). All such sculptures would have been clearly visible against the skyline. But how



could visitors have seen the decorated ceiling of the pteroma, between columns and wall? The subjects of the carved coffers were two: a Kentauromachy and a more limited series of athletic scenes, presumably funerary games. The tall podium (which enveloped the rock-cut funerary chamber) could not be entered; neither could the courtyard, as already mentioned. The coffers stood at a (calculated) distance of approximately 21.50 m. from ground level, and could only be viewed at a slant, looking up from points external to the stepped podium. Today, these slabs are set up vertically, like normal relief panels, but they were laid flat when in position, yet they show no perspective distortion or visual correction to aid the onlooker (cf. ill. 13). It is reasonable to assume that only their general presence was perceivable, and perhaps their subject, through the enhancement of paint; certainly not their details, especially given the peculiar perspective. 6

A higher distance from the ground was certainly involved at the tomb of Maussollos in Ha-likarnassos, the prototypical "Maussolleion" (ill. 22). The carved coffers, in a position comparable to those at Belevi, seem to have carried scenes with the Deeds of Theseus and perhaps even those of Herakles, but they are poorly preserved and difficult to read in their present state. It is, however, obvious that some details were left uncarved or only roughly finished, perhaps because the sculptors were aware that they could not be observed at close quarters. The podium, much taller than at Belevi, was equally inaccessible, and the intercolumniations of the (Ionic) peristyle were filled with large-scale statues that would have (at least partly) blocked upward glances. In addition, the wall of the cella may have been topped by a "monotonous" frieze depicting a chariot race, for which the spacing of the figures, as well as the repetition of the same basic silhouette, would probably have aided re-

cognition. Yet its visibility also must have been virtually nil. The same could be said for the external frieze thought to have encircled the last step of the roof pyramid on which the large marble chariot stood. It depicted a Kentauro-machy, therefore a narrative subject, but at a total building height of approximately 50 meters, it is doubtful that the carvings could have been read as anything more than a glorified molding.<sup>7</sup> Several sculptural elements of the Maussolleion, therefore, seem to have been destined to relative obscurity.

The Halikarnassos structure was built by Greek workers, architects, and sculptors; yet it was meant for a Karian ruler and was based on indigenous as well as Classical traditions. Purely Greek seems instead the façade of the Great Tomb at Lefkadia, in Macedonia. Built around 300

B.C.E. for an at-present unknown occupant, it resembled both a Doric temple with engaged columns and, because of its upper Ionic order, a two-storied stoa surmounted by a pediment (cf. col. pl. 4). It made ample use of paint and we shall return to it in chapter 4, to discuss polychromy but it also had a continuous frieze in stucco, with a battle between cavalry and foot soldiers, some wearing Oriental costume.

Whether the subject was an Amazonomachy or a true historical event, perhaps an allusion to the owner's eastern campaigns with Alexander the Great, it is now difficult to tell, given the relatively poor state of preservation of the figures and their continuing deterioration. Yet time and care were taken to compose and model, albeit rapidly, such a frieze, despite the fact that the tumulus erected around the tomb after the owner's burial would have completely hidden the entire structure from view. 8

It could be argued that all the examples adduced so far are either early at a time when expense might have taken second place to impressiveness and elaboration,<sup>9</sup> especially given the financial support of foreign sponsors like King Kroisos or they are funerary, and therefore fulfilling a debt to the deceased rather than a commitment to the viewer. Yet other similar instances could be cited. One shall here serve for all.

The initial date of the Temple of Artemis at Magnesia (cf. ill. 15) has been variously given, but the structure was definitely finished, perhaps through more than one phase, by the late second century B.C.E.<sup>10</sup> It was an impressive Ionic building, pseudo-dipteral, with a continuous frieze running above the epistyle and depicting an Amazonomachy on all four sides. Herakles appeared on the western (front) façade, but also on the north and south flanks, and, since the east frieze is now fragmentary, his original presence there cannot be excluded. It has been calculated that the frieze, 157 m. long, contained at least 140 Amazons, over 100 of them on horseback. The Greeks, by contrast, are all shown on foot, with a great variety of costumes and weapons. We shall comment later on the possible significance of this subject on a temple of Artemis. Here, it suffices to point out that, at a height of approximately 15.70 m. from ground level, this relatively small frieze would have seemed barely

more than a glorified molding, hardly perceptible in all its narrative details.

Close inspection reveals that the carvers were aware of this situation. Different hands and approaches to relief work are clearly discernible. Some figures exhibit a great deal of undercutting that practically detaches them from the background, whereas others adhere to it for almost their entire extent and look like virtual cut-outs. Some figures are

well proportioned and executed, others are dwarfish, with overlarge heads and lumpy musculature, roughly carved. Stereotypical scenes abound: the riders being pulled off their mounts, the stumbling horses, the victims grabbed by the hair all the compositions typical of a battle frieze, repeated at intervals, not only to fill the long space, but also to ensure recognition, even if by general outlines. It has been noted that very few fallen combatants are shown, probably because the high location would have made them invisible from the ground. Similarly, hooves and feet are often summarily carved. Once again, even this narrative frieze can be considered at the level of a glorified molding.

I would suggest that this awareness of difficult visibility since early times led to an increased preference for "monotonous," symbolic friezes at any level, beginning as early as the fourth century. The rosette/phiale motif that decorates all metopes of the Epidaurian Tholos (ill. 23), the boukrania and phialai on the inner frieze of the propylon at the same sanctuary, or on the external one of the gate at Samothrake, even the many friezes of dancing women whether Archaistic or Hellenistic in style at Samothrake, Sagalassos, and elsewhere, or of Erotes at Athens, Samos, and Pergamon all these architectural sculptures rely on the rhythmical repetition of a basic image with minor inner variations to produce a pleasing and immediately perceivable effect. 11

Did location and angle of viewing affect not simply the choice of motifs and the execution of details, as we have already seen, but also the manner of carving? This suggestion has occasionally been made for the two different styles of relief sculpture observable on the frieze of the Siphnian Treasury at Delphi: the east and north sides (ills. 24-25), more immediately visible to a visitor ascending the Sacred Way to the Temple of Apollo, are by the more plastic "Master B," the west (cf. ill. 16) and south by the more linear "Master A." Emphasis on silhouette, wide spacing, and chiaroscuro details are certainly conducive to greater clarity than foreshortening, overlapping, and high modeling. Yet the west façade of the Treasury marked the entrance to the structure, and its frieze was more directly observable, given the narrow terrace that fronted it, whereas the east (rear) side could only be seen from the Sacred Way and, from the distance, would have

been partly blocked by the Sikyonian Treasury that preceded the Siphnian.<sup>12</sup>

That it was seen, however, and noticed, and cited, is convincingly argued by Kenneth Shapiro Lapatin, who stresses Pindar's use of the east frieze's theme as one of the *exempla* of filial piety in his Sixth Pythian Ode (vv. 28-46). The poem, addressed to Thrasyboulos, emphasizes his

willingness to face danger for his father, Xenokrates of Akragas, in a chariot race, by comparing it to that of Antilochos who gave his life to rescue Nestor. A new reading of the inscriptions on the east and north friezes has shown that the former depicted the battle between Achilles and Memnon over Antilochos' body, with his father desperately gesturing at the edge of the scene, while the gods in Olympos, on the southern half of the frieze, sat in council to decide the fate of the main combatants. Given Pindar's many allusions to structures in his verses, and his inclusion of architectural terms in that very ode, the possibility of a deliberate reference to a Delphic building is strong, especially in an epinikion for a Pythian victory. 13

I still tend to believe that the two carving styles of the friezes are directly connected to the masters' ethnic affiliations, rather than to the location of their assignments: the silhouette technique is very much at home in Ionian territory and, to some extent, in Magna Graecia, whereas the more modeled rendering is favored not only in Attika but also in the Kyklades.<sup>14</sup> Were I not so leery of attributions, I would identify Master B as Aristion of Paros, a Kykladic master with a long period of activity in Athens. I will also acknowledge, however, that location influences composition, as clearly shown by the west frieze of the Siphnian Treasury, whose tripartite arrangement reflects the rhythm of the intercolumnar spaces and supports below. This point cannot be overemphasized: all architectural sculpture should be viewed within the structure which it decorated, not in isolation almost as independent monuments within the rooms of a modern museum.

It has been forcefully demonstrated, especially with reference to the pediments of the Temple of Zeus at Olympia (ill. 26a-b), that poses and compositions were carefully keyed to the surrounding architecture at Olympia, specifically, the position of triglyphs and columns below, which provided the underpinning for these often colossal images. Impressive as they appear today at close quarters, they are nonetheless diminished, as it were, by the neutral environment in which they are displayed. Discrepant scale may also have been the consideration that relegated the Olympia carved metopes to the porches, rather than to the outer Doric frieze, to prevent immediate comparison in size with the gable sculptures; yet the metopes too were meaningfully connected to their frameHerakles prying the triglyph with a crow bar to breach the wall of the Augeian Stables; or carrying the sky/entablature on his raised forearms while waiting for the Apples of

the Hesperides (cf. fig. 7).<sup>15</sup> This metope in particular, with its tripartite arrangement of verti-

cal figures, dramatically echoes the pattern of the framing triglyphs, yet background color, spacing, and a few horizontal accents would have made the difference obvious.

On the Parthenon, this visual separation was not adopted, and decorated metopes appeared directly below the pediments, although scales also varied. Perhaps the desire to imitate a treasury at colossal scale, rather than a temple,<sup>16</sup> received precedence over optical coherence. Here the total effect of the architectural sculptures was more pictorial and impressionistic, as evidenced by the teams of horses on the east gable, emerging from, or sinking into, the horizontal cornice as if penetrable. The same effect was obvious on at least one metope of the east side (no. 14), with Helios' quadriga rising from the waves. New studies are stressing balanced arrangements in terms of numbers of figures and comparable themes, from metope to metope, across determined spaces for instance, on the Parthenon itself and on Temple E at Sicilian Selinus (ill. 27).<sup>17</sup> Static and lively compositions were harmonized with the surrounding architecture on many other

structures, although we can no longer judge their effect.

Relationship to frame and extent of visibility should also be considered in the case of more or less interior sculpture. How clearly discernible, for instance, was the frieze running over the inner Ionic columns of the Temple of Apollo at Bassai (cf. ill. 9)? Not only was the cella small and encumbered by spur walls and columns, with little room for the viewer to stand back and look; it was also oriented to the North, with a deep doorway through which relatively little light would have entered, past pteron and pronaos, especially during the Arkadian winters.<sup>18</sup>

The Parthenon frieze was certainly much better lit, although its visibility was also limited by the Doric peristyle (ill. 28). In addition, it was in very low relief and exhibited a great deal of overlapping, usually with little overhead background to give individual figures greater prominence. An intriguing study has pointed out how the outer colonnade served to frame certain groups of figures for the viewer standing outside at ground level (ills. 29-30). This quasi-metopal arrangement worked, however, only for the two façades, and for the eastern better than for the western, although important elements appeared also on the long sides. A second study has stressed the "processional" nature of the composition, which the peristyle columns would have obscured and revealed in turn to a visitor moving along the north or south side of the building.<sup>19</sup> I still find it hard to believe that selected views were plotted, even if the frieze was carved in situ, since, according to the first theory,



the viewer would have had to stand at specific locations to obtain the desired framing. As for the second, a controlled distance was also required, to avoid either the obstruction of sight by the outer entablature or the obstacle of the krepidoma and the terrain, yet the feasibility of such a walk along the temple is not explored.

## Program

The greater or lesser visibility of the Parthenon frieze is not simply an issue of aesthetic significance it is one of great importance within the context of the Parthenon program. What, of all the sculptural ornaments of the temple, was to be "read" together and contributed to its global message? If, as we argued at the beginning, architectural sculpture was intended as a permanent public statement, comparable to the recitation of a bard or the performance of a play, such a visual statement had to be intelligible both at a single installment and as the sum total of all its parts, perceived through what I may call "fractional" readings, each determined by the point of view. It is obvious, for instance, that visitors confronting the Parthenon would have taken in at once, say, one set of central and lateral akroteria, one pedimental composition, one set of metopes, and perhaps, less clearly, one stretch of the continuous frieze. Alternatively, from the long sides, they would have seen only one set of metopes

and perhaps one stretch of frieze, with the corner akroteria visible only as profile silhouettes. Intermediate positions, such as at any of the corners, might have revealed the *presence* of metopal and pedimental compositions, but not necessarily their subjects. Only after a complete circuit of the building would all elements of the decoration have become manifest and all subjects known. In addition, at least one scholar has now argued that not one, but several festivals of Athens, celebrated in different months, were depicted on the frieze, thus indirectly supporting the case for a fractional reading of the whole.<sup>20</sup> Was the Parthenon sculptural program conceived in such a way as to allow for intermittent reading? What may seem a relatively easy answer in the case of the Parthenon building at the height of the Classical period, when experimentation was to some extent over, and an intended "program" seems likely is instead a much more complex issue for earlier times or different structures. We shall return to the Parthenon itself later, but we should

first explore the very question of sculptural programs and manners of "reading." Crucial to this problem is the extent of our understanding.



In a recent essay Salvatore Settis has outlined the complexity of the relationship between text and images, with specific reference to oral traditions. He points out that our iconographic research has been inevitably conditioned by our experience with Christian art, which is heavily dependent on a single authoritative written source and its collateraliesthe Bible, with the Gospels, the Apocrypha, and the Lives of the Saints and Martyrsand is strictly controlled by the Church. Yet this experience is likely to mislead us when dealing with ancient art, which depends virtually on no book at all. Oral tradition, he maintains, precedes not only the written version, but also the image, and all oral presentations, by their very nature, encourage changes, additions, and interpretations. Each listener is in fact a potential future narrator, whether professional or empirical-like Plato's nurses recounting myths to childrenand each narrator retells the story from a specific point of view. Moreover, in addition to the multi-

plicity of ancient versions, all of them per se valid, the modern interpreter must also take into account the multiplicity of ancient performances. These, however, were not limited to actual recitation but also found expression in religious rituals, dances, and gestures, which eventually led to permanent images. Such images were therefore already familiar to the ancient viewers, who could understand them even as a form of shorthand, whereas the modern observers lack comparable experiences and, dangerously, tend to look for a classical text to guide them. Yet no one-to-one correspondence between text and image can be expected, as is the case with Christian art, and therefore our iconographic interpretations must proceed along two parallel but independent lines, accepting the testimony of the written sources, but also exploring the variety of the visual renderings to uncover their pattern and reconstruct the series to which they inevitably belong, "poichè il riferimento alla serie è inevit-

abile per la ricostruzione dell'immagine singola."

21

Settim's essay seems to take position against a certain form of current iconographic analysis that would lead archaeology to lose the advantage it has over art history. His targets are those archaeologists who attempt to squeeze at all costs a "historical" meaning from the images, looking into myths to capture a reflection of their contemporary political and social history, even when concrete evidence for both the works and the recipients (intended not only as the patron but also as the anticipated public) is highly uncertain.<sup>22</sup> After this premise, and Settim's emphasis on the complexity of ancient oral tradition that makes it almost irrecoverable, it is surprising to me that he should strongly endorse Marconi's book on the

figural program of the metopes from Temple E at Selinous. Yet the "courageous and deserving" effort is praised because the sculptures are analyzed against the background of the city itself, not only its topography but also its rites and its civic values. In particular, Settis points out that after the unified topic of the metopes of Temple F the Gigantomachy the individual episodes of the twelve panels from Temple E *must* be read as a coherent discourse with a similarly unified message. In other words, if an earlier building could achieve a coherent iconographic program, all the more valid it is to expect a comparable program at a later stage. 23

I would agree with Settis on all fundamental points: on the difficulty of reconstructing messages (whether verbal or visual) when no single version can be considered canonical, and when the evidence itself is highly fragmentary and elusive; but also on the need to make the attempt, as long as we remain conscious of how much is arbitrary and speculative in our reconstructions. The main issue in our context, however, is whether the existence of a *program* for Temple E can be taken for granted since it comes *after* Temple F, as if a turning point were reached in architectural sculpture, *ante quem non*: before such a date, during the Archaic period, myths and images could be used almost at random; after the beginning of the fifth century, they were selected with different criteria. To be sure, Settis is not implying this to be the case; I am expressing the question in extreme terms because the answer I can give is highly ambivalent, for both Archaic and Classical times. I should emphasize

once again that I am dealing here not so much with meanings as with visibility what could be perceived at a single glance.

In the case of Temple E at Selinous (dated by Marconi 460-450, on excavational evidence), the carved metopes stood over both porches. Only six of them could therefore be perceived at one time. Marconi builds possible symmetrical correspondences within, but also between, façades, comparable to the mental thematic associations of oral poetry (cf. ill. 27). And, as all ancient reading was supposedly vocalized, so one can imagine the ancient viewer moving from metope to metope, from episode to episode, commenting aloud and creating a new discourse, like a hymn of praise to the goddess Hera.<sup>24</sup> Yet I wonder whether both sides could be simultaneously understood and appreciated, even after repeated visits, in the complex interlocking suggested by Marconi.

Almost the opposite case exists at Bassai (cf. ill. 9), where the continuous frieze of the interior had two different subjects, or even three, according to a recent hypothesis. Whether or not we accept two episodes



within the Amazonomachy cycle (one at Troy, the other at Themiskyra), certainly the contrast between the battle against the female warriors and the encounter with the horse-man creatures was obvious and unmistakable. Yet the breaks between the two where one subject began and the other ended did not fall at symmetrical or even predictable points, nor did they correspond to tectonic articulations.<sup>25</sup> To be sure, visitors could face major scenes either directly upon entering the cella, along the south side or, turning back, above the door, on the north. But what of the east and west (long) sides, with their relative proximity, given the narrow confines of the space? Different subjects in sequence could perhaps have been acceptable on the Ephesian parapet (if indeed perceptible), since the span was long and the viewer could not have taken in the entire extent of it at one glance. Yet this was not the case at Bassai, a Classical temple conceived

*after* the highly programmatic Parthenon, and perhaps under Attic influence.

A similar situation obtains at Delphi, where the early fourth-century Tholos in the Sanctuary of Athena Pronaia carried outer metopes presumably decorated with both an Amazonomachy and a Kentauroromachy. Yet the round shape of the building meant that no break was possible between the two subjects, and that certain viewpoints existed from which the ancient visitor would have seen both of them at once.<sup>26</sup> Is this need for a clear definition a modern requirement that did not correspond to Greek visual perception?

The continuous friezes of the Siphnian Treasury and of the Athenian Hephaisteion (ca. 449-430) seem to suggest otherwise. In the earlier building, each side is framed by vertical, receding fasciae: two on the west and south, three on the north and east sides (cf. ills. 16 and 24). At the Hephaisteion, on the east side, the figured zone over the pronaos stretches from the southern colonnade to the northern, spanning the pteroma on both sides; the corresponding frieze over the opisthodomos, however, stops above the antae before reaching the aisles. The east frieze begins and ends without special framing, but the west composition is delimited by vertical piers at either end, as if to alert the viewer that the figured scenes do not extend around the corner along the sides. Both east and west friezes, moreover, are composed with great attention to the underlying supports and the architectural articulation of the porches, with heavier "loads" (e.g., fallen warriors, seated figures) above

columns and antae and lighter "loads" over the intercolumniations and the passageways.<sup>27</sup>

By and large, unity of theme seems to be a constant of continuous friezes, whether by side each aspect of a building carrying its own

topic from corner to corner or by perimeter the entire structure being surrounded by a single subject. Yet a mid fourth-century frieze on Delos, so badly weathered as to be stylistically illegible, seems to depict the Deeds of Theseus in an articulated manner each episode is vertically framed by the raised borders of its block where it joins the adjacent one, almost as if the entire strip were a series of metopes between triglyphs rather than a continuous band. This peculiar treatment has been attributed to Athenian influence.<sup>28</sup>

Doric metopes are by definition articulated into panels, each containing a specific subject, although they may be thematically linked, like the individual duels of a single battlea Gigantomachy or an Amazonomachy, for instanceas if a battlefield were being inspected through a series of windows. Yet some Archaic examples disregarded the intermediate triglyphs to continue a narration across several spaces. In such cases, it is clear that the sequence had to be read, and seen, as a continuum. The most obvious example are the so-called Sicyonian metopes at Delphi that depict the ship Argo in two adjacent panels, as if the boat were seen at a distance through two openings whose central post cuts off from view the center of the vessel (ill. 31). Another panel from the same series shows a huge boar being hunted, but the hunters, now missing, would have appeared on separate metopes, so that once again more than one slab was needed to tell the

story.<sup>29</sup> The date usually assigned to these reliefs is about 560.

A similar composition has been postulated for an earlier structure (ca. 580-570): the Temple of Artemis on Corfu. Carved metopes seem to have decorated the pronaos, or perhaps one façade; they certainly did not encompass the entire building, since some plain panels have been recovered among the scant architectural fragments. The best preserved relief shows a warrior attacking to his left, with a hand from a second (now largely lost) personage appearing at his elbow, either to encourage or restrain him. It has been assumed that an adjacent metope held a similar composition in mirror image, since obviously an opponent is needed to complete the scene, perhaps a depiction of the duel between Achilles and Memnon.<sup>30</sup>

Two or more metopes are involved in some of the sequences at the Treasury at Foce del Sele, most recently dated around 570-560. Here the evidence, unlike that from the previous examples, is almost completely preservedindeed, we now have more sculptured panels than can be comfortably accommodated around the building, according to the dimensions originally published by the excavators, and a few could

even belong to different structures. This problem is compounded by the fact that some reliefs appear unfinished, and they were all found in fragments and out of context, without reference to distribution. The number of subjects represented is considerable, and attempts to arrange the panels around the building on the basis of thematic affinity have not met with universal acceptance because of controversial identifications or lack of architectural evidence in support. The most recent study suggests that the "program" conveyed a broad message: the need to fight "any form of arrogance, deviancy, madness, monstrosity, violence and sacrilege, barbarism and disorder, for the creation or the restoration of a condition of universal or individual harmony." Such general terms seem so wide that they could embrace virtually any ancient mythological depiction. 31

Yet what matters in the present context is not so much the program (to be discussed again in another chapter) as the reading of the reliefs and their interconnection. For instance, one sequence has Apollo and Artemis, in virtual duplication of outlines, shooting arrows across the triglyph onto the next panel where Tityos is depicted carrying off a diminutive Leto (ill. 32). Another sequence shows the adventures of Herakles on Mt. Pholoe and involves at least six metopes: one containing the wise centaur Pholos, another with the hero in action, and four or five filled by a centaur each, variously wounded by Herakles' arrows or arriving at a gallop. Other sequences of two or three metopes each could be, and have been, suggested, but the above mentioned suffice to ask the question. An episode spread across six panels could have occupied the entire façade of the small building, and thus have been "read" as a unit; but the myths narrated in twos and threes would have been more difficult to isolate, when

interspersed with several other subjects, on the long sides. What gave ancient viewers the necessary clues to start and stop their "reading"? To be sure, no story was ever told in antiquity, whether orally or visually, that was totally unknown to its public, and we should not judge the relative obscurity of some of the Sele reliefs from our limited perspective, certainly unaware as we are of specifically Magna Graecian myths, or at least better acquainted with their Attic versions.

At Assos, in the Troad, therefore once again in a peripheral area of Greek culture in contact with many non-Greek traditions, the disparate subjects carved on the Athenaion (cf. ill. 11) (specifically with respect to the architrave frieze) have been explained in terms of multiple themes, some mythological and some apotropaic, that worked "paratactically,

yet collectively" to produce a meaningful ensemble, representative of the forces (both wild and civilized) active in the Archaic world. This suggestion is certainly valid, yet it admittedly relies on the intuitive rather than on the intellectual reading of the viewer, and would therefore not conform to our rational conception of a program.

It is perhaps unfair to expect answers from monuments presenting such complex problems; yet we fare hardly better with another building that stands at the threshold of the Classical period, is well known in all its dimensions, has preserved much of its sculptural decoration, and was built by the most literate and best known of ancient cities: the Athenian Treasury at Delphi.

One sequence of six metopes depicts the myth of the Cattle of Geryon, with the herd spread across four panels and Herakles shooting, once again, across a triglyph at the three-bodied opponent. The findspot of one slab from the series ensures that the topic occupied the west (rear) of the building, as appropriate not only to the rather monotonous arrangement of animals, but also to the hypothetical location where the Raid took place. It has therefore been suggested that a comparable sequence depicting an Amazonomachy was spread across the east front, as suitable to the Oriental cast of the mythical women and

their symbolic allusion to the Persians. The Deeds of Theseus and those of Herakles would have occupied the south and north sides respectively, not only balancing each other, but also quite "readable" despite their varied topics, since each was unified by a common protagonist.<sup>33</sup> Were we to be sure of this arrangement, it would imply that, at least by the early fifth century, the Athenians were conscious not only of thematic programs, but also of side orientation as a function of geographical allusion. Yet a further difficulty arises.

An Amazonomachy across the east front of the Athenian Treasury would form a visual referent to the corner akroteria, which depict warriors dismounting from their horses. Although the upper part of their bodies is missing, they have been identified as Amazons, since a virtual replica in relief occurs on one of the metopes (no. 10). The east pediment, of which remarkably little is preserved, is thought to have shown Theseus kidnapping Antiope. The entire façade of the Treasury, therefore, would have been devoted to a single theme, with the figures on the roof descending, as it were, to help either with the battle or against the abduction of their queen. Is such an extreme correlation possible? Would Amazons, moreover, have been placed on the roof, a position usually reserved for Nikai or other supernatural creatures? I had once suggested that their presence had otherworldly, even funerary, implica-

tions, almost like the Valkyries of the German Valhalla, but this explanation no longer satisfies me.<sup>34</sup> A different identification—the akroterial warriors as the Dioskouroi, who would be perfectly appropriate for the location—is somewhat weakened by the recognition that all corner akroteria, not just those on façade, had the same subject. But Amazons above the Cattle of Geryon, or above a gable that seems to have depicted a Gigantomachy, would make little sense, just as those of the east would be redundant. I cannot here propose a solution; I can only raise the question of the assumed interconnection of all architectural sculpture visible at a single glance.

Akroteria are hardest to reconcile with the rest, partly because of their fragmentary survival and our imperfect knowledge. Complex groups can occur together with empty gables and metopes, and therefore stand alone in recounting a myth-like Boreas abducting Oreithyia on the peak of the Temple of the Athenians on Delos (ill. 33, figs. 17-19). The corner figures, representing the fleeing companions of the Athenian princess, are part of the same story and can be "read" together. If this coherence of corner and central ornaments could be accomplished by 425 B.C.E., it is not surprising that, around 360, Perseus killing Medousa on the peak of Perikle's Heroon at Limyra is balanced at the extremities by the two surviving Gorgons (ill. 34, figs. 20-21). The myth alludes to a local hero (Perseus as alleged ancestor of the Persians), and it occurs in visual connection with the Karyatid-columns of the façade; the processional friezes that include Oriental dignitaries and soldiers move along the

flanks of the building and are therefore not in direct correlation with the akroteria.<sup>35</sup>

Yet the sculptural situation is more complex at the Epidaurian Asklepieion (cf. ill. 19), another building (ca. 375 B.C.E.) for which we have almost complete evidence.<sup>36</sup> The central east akroterion shows Apollo kidnapping Koronis, Asklepios' mother, but the two corner figures are two winged Victories, one of them so slender as to have been occasionally (and erroneously) taken for a youth. On the other side, a central, opulent Nike holding a bird is flanked by two young women wearing different costumes (or, at least, wearing them differently) and riding powerful horses. They have been called Aurai, and have been taken as allusion to the healthy breezes wafting over the Epidaurian sanctuary yet all akroterial sculptures stand atop pediments depicting episodes of the Trojan war: the Amazonomachy with Penthesileia still riding in glory in the center of the west gable, and the Ilioupersis with Priam in his final moments on the east. Asklepios' parents, Apollo and



Koronis, could perhaps be reconciled with one battle theme, since Podaleirion and Machaon, Asklepios' sons, went to Troy with the Greek army. But Machaon is supposed to be Penthesileia's helpless opponent under her horse's hooves, on the opposite gable, so that the correlation between protagonists (parents-son) is not visually apparent, and the son's dangerous situation is hardly commendable: the viewers would already know that he died at Troy. Why Victories, moreover, to accompany the Rape scene, and why (local?) breezes to flank a battlefield?

Perhaps each element of the decoration was to be read independently, the winged creatures as appropriate to the high location, the gables as alluding to the help that physicians could give to the wounded. Here again, however, one has to wonder at the relevance of the subjects, since the Epidaurian Asklepieion, to judge from the recorded cures, seems to have specialized in treating disease and gynecological problems, rather than war-related injuries. A more fitting topic for the east side could have been Asklepios' miraculous infancy and discovery on Mt. Titthion, an Epidaurian legend that would have been in keeping with the themes of divine births inaugurated by the Parthenon and the Argive Heraion, and which is in fact depicted on a large votive relief from the Athenian sanctuary to that god.<sup>37</sup> Or was Asklepios only a demigod, not to be glorified with a personal appearance within the decoration of his temple? The absence of all divine

figures from the gables seems to be a "first" in architectural sculpture.

One final point: to "read" the story in sequence, the visitors to Epidaurus would have had to look at the rear gable first, then at the front or would the dramatic conclusion of the war have led them to expect a previous episode on the west pediment? Traffic patterns, as far as can be judged at present, would seem not to have encouraged all-around viewing, and the shortened plan of the temple, with its lack of opisthodomos, would have confronted viewers with a blank wall behind the peristyle columns. Here, too, our expectations of visibility and programs do not quite match the evidence.

That the two pediments of the Asklepieion should show two moments of the same event is unusual, if not totally unprecedented: the late-Archaic Temple of Aphaia at Aigina, in its final arrangement, also showed Greeks and Trojans at war on each gable (figs. 22-23, contrast col. pl. 2); but they were two different wars, rather than two successive episodes, and the history of replacement and reconsideration that the sculptures imply may now slant our reading of the evidence. Yet there is

no mistaking the peculiar central akroteria, of which three are said to exist, thus suggesting deliberate reproduction during possible renovations.<sup>38</sup> The elaborate composition shows two typical korai holding their skirts aside, as one might expect to find on the Athenian Akropolis; but at Aigina they flank a majestic, if thoroughly artificial, anthemion, perhaps a stylized rendering of the tree of life. Are the young women Nymphs? If so, they would help identify at least some of the nameless and apparently generic votives on the Athenian citadel. They seem not immediately associative with the battle scenes below them, yet they may allude to Aphaia, who was, after all, a local Nymph, and thus relate also to the gables that show local heroes: Telamon on the east, and his son Ajax on the west. Only a local viewer, however, might have understood the connections and drawn the necessary inferences.

It would be important to determine whether akroteria ought to be "read" together with whatever other architectural sculptures appeared on a building. The Temple of Athena Nike on the Akropolis seems to have had a Gigantomachy on the east gable, below which the continuous frieze depicted an assembly of gods. The central akroterion in gilded bronze showed Bellerophon on Pegasos, killing the Chimairatherefore, a heroic adventure. The west pediment supposedly held an Amazonomachy. It could therefore be suggested that the battles depicted on the other three sides of the small structure should also be taken at the mythological/epic level, rather than at the historical one. Specific events and dates have been mentioned for themthe Battle of Marathon (S), the Battle of Megara (W), the Battle of Plataia (N)and a crescendo has been noted, from historical in the friezes, to mythological in the pediments, to allegorical on the balustrade surrounding the shrine. But could a viewer take in

all the elements of this complex program at one glance? Certainly, the magnificent balustrade was visible only from a distance, well before entering the Nike precinct. Other authors prefer to see the Trojan War at least on the north and west sides, or a single topic for all three battle friezes, in an Athenian aretology connected with the saga of the Heraklidai.<sup>39</sup> Whether the nature of one akroterion is sufficient to determine the tenor of the other sculptures is perhaps too much to ask.

Yet the Parthenon has recently provided a new insight. On the basis of the heavy doweling required by the corner akroterion, Manolis Korres has reconstructed an off-balance Nike in that position.<sup>40</sup> The central ornament was definitely a large floral arrangement, but the lateral ones

now join that theme of victory that was so prominent throughout the rest of the building. The visitor standing in front of the east façade, therefore, would have seen the Birth of Athena, perhaps being crowned by Nike, just above a series of metopes depicting the Gigantomachy, in which Athena again received Nike's tribute, on one of only two three-figured panels that therefore was all the more noticeable; and in entering the temple itself, that visitor would have been confronted by the colossal gold-and-ivory image of the goddess with her right hand extended, supporting that very same personification of success and glory, *after* the battle, as emphasized by her own shield at rest by her side. The sequence of episodes and the recurrent symbolism would have been inescapable.

It is therefore salutary at this point to remember that, for all the apparent coherence of the great programmatic message embodied by the Parthenon sculptures, and for all our theorizing, we have not yet succeeded in reaching consensus on the meaning of the entire frieze, and are baffled by the insertion of unexplained episodes amidst the Kentauroomachy metopes on the south side. How were those episodes to be read within the framing context? Why were they needed, when the participants to the mythical battle could easily have been multiplied to suit the required number of panels?

I close with one more example that may serve to illustrate the problems of this entire issue of programs and visibility. In the plain of Himera, on the northern coast of Sicily, a great Doric temple was erected. It was probably dedicated to Athena, but it is commonly called the Temple of Victory, because its architectural style and the choice of its location appear to connect it with the great Syracusan defeat of the Carthaginians in 480 B.C.E. It had pedimental sculpture, unusual for the island, and respected a Magna Graecian tradition in having a continuous series of lion-head waterspouts along its eaves.<sup>41</sup> These feline heads seem to follow two different patterns, those along the north side appearing more ferocious, those along the south more decorative (figs. 24-26). This difference could easily be unintentional or simply due to different workshopsGreek masons are known to have improved on their models as they worked their way around a temple. The variant rendering is observable

today, when the best preserved of such spouts are displayed in a row in the Palermo Museum,<sup>42</sup> but one wonders whether the ancient visitors, moving from one side of the large temple to the other, would have retained enough of the sculptural details in

their visual memory to note the variation. Yet modern commentators have suggested that the lions facing toward the shore were made to look ferocious against possible enemies (the Carthaginian threat had come from across the sea), whereas the lions facing toward the city itself were more benign in appearance.

This interpretation seems to me an entirely modern construct. Would we have suggested it had we not known the historical events and the nationality of the enemy, or had we been able to see the lion heads in position, high up on their roof, each set away from the other? Perhaps most of our questions, to which we cannot find satisfactory answers, derive from our current expectations, from our times when we can use photography and all sorts of other technical means to view, review, analyze, and compare. We see programs where there might have been none, and we want to "read" everything together because as Settim has stressed we are accustomed to the controlled messages of Christian art. That message there was is undoubtedly, but it may not have been as logically constructed as we wish. The ancient viewers may have been entirely satisfied with episodic narration, each myth recognizable because familiar and therefore pleasurable, each element metopes, pediments, akroteria to be read

per se, telling its own story. To be sure, some individuals might have detected a deeper meaning behind the more obvious story line, and some buildings, especially those built in Classical times, might have presented a coherent, many-layered sculptural program. I would argue, however, that we can no longer recapture the ancient mentality, or even the ancient visual acuity and sensitivity, and that we tend to overreach in our interpretations because of our different experiences.

The effort to recapture the past should be made, certainly, but with a clear understanding of our own limitations, and letting the monuments speak for themselves, with their own voices. We should refrain from judging with our modern morality and sense of fitness the Ephesos parapet was too high off the ground, and therefore it should not have been carved with narrative compositions; rape is bad (even if it is the North Wind kidnapping Oreithyia, thus ensuring the elements' favor toward Athens; or Apollo forcing Koronis so that a god of healing could be born), therefore it should not have been glorified at the peak of a sacred building. Visibility and content may seem objective components of a work of art, but it is the viewer, in the long run, who validates the monument, and we are more than two millennia away from the ancient Greeks. That their sculptures can speak to our emotions across the

centuries with such still-powerful voices is one of the wonders of classical art.

## Notes to Chapter 3

1. Vitr. 3.5.9: "Quo altius enim scandit oculi species, non facile persecat aeris crebritatem . . . 10. Item zophorus supra epistylum . . . ; sin autem sigilla designare oportuerit, quarta parte altior quam epistylum, uti auctoritatem habeant scalpturae." Cf. also 4.3.5 for the half-metope theory, and Preface to book 1.2 (also Preface to book 6.7) for his protestation of practical knowledge. Altekamp 1991, 310 n. 1048, considers Vitruvius too late a source for an understanding of Greek meanings, and closer, in that respect, to modern commentators.

2. See Rockwell 1989, 25253, on the Column of Trajan; other comments were made in a public lecture he gave at Haverford College in 1990. Widespread previous criticism on the "legibility" of the Column is summarized by Davies 1997, 4445; she stresses instead the possible ritual connotation of the circular movement around the monument demanded by its carvings.

Bernard Ashmole seems to have calculated that only one third of the surface area of pedimental sculpture could be seen from below, as I am kindly informed by Prof. A. Stewart. Another comment, made years ago to me by Dr. Marian H. McAllister, suggests that the Parthenon, with column height of ca. 10m., was probably the tallest building on which narrative sculpture could still be perceived with relative ease by the human eye.

3. Yalouris 1992, 14, assumes that pedimental sculptures were delivered in perfect state by their carvers, and were only "chopped up" by the masons who had difficulty installing them within the tight-fitting confines of the pedimental shelf. I find this statement unsupported by, e.g., the truly extensive curtailing of the Temple of Zeus sculptures at Olympia, albeit also mentioned by Yalouris in this context.

4. Another teaching device I used was to ask the students to "freeze" and then tell me, without looking around, what moldings were present in the classroom in which they sat every day. This request invariably brought out the fact that the students were completely unaware of the existence of moldings, even when they were relatively prominent.

5. Ephesos parapet: see supra, ch. 2 n. 63. Given the uncertainty about many details of the Archaic Artemision, especially the varying heights suggested for the columns, it is impossible at present to calculate the exact distance of the parapet from ground level. Proposed column heights oscillate between a minimum of 8 and a maximum of 12 times the drum diameter of 1.50 m., and thus between 12 and 18 m. Krepidoma, pedestals, carved drums, capitals, and entablature would have contributed additional height. For discussion on these points, I am indebted to Prof. Lothar Haselberger.

6. Belevi Mausoleum: the latest reconstruction is by Hoepfner 1993b, whose plans to scale I have used to calculate the approximate height of coffers from ground level. See also Webb 1996, 2223, 7679, and supra, ch. 2 n. 60. The apparent ground slope on the south side, at the level of the courtyard, ex-



tant today, would have been removed had the monument been finished; yet even from that position, the coffers, especially of the other three sides, would have been difficult to see. The upper level included columns with palm capitals and a two-fasciaed architrave, that have been variously reconstructed either within or without the courtyard, behind the Corinthian columns of the North façade.

I am not listing the carved coffers of the Athenaion at Priene among my examples because they could be viewed directly from below by any visitor entering the peristyle; their composition, moreover, took into account the difficult perspective. Although not ideally located for proper viewing, the Priene coffers were nonetheless much more readable than those here cited.

7. For a lengthy discussion of the Halikarnassos Mausolleion, with bibliography, see Ridgway 1997, 11235. For a somewhat different reconstruction (Hoepfner 1996b), which changes the location of the friezes and places freestanding sculptures behind, rather than between, the columns, see *supra*, ch. 2 n. 45, and ch. 1 n. 50. If the Chariot frieze was indeed inside the burial chamber, as argued by Hoepfner, its visibility by living eyes would have been nil; the coffers, as part of his suggested dipteral arrangement, may have been even more illegible than if within a single colonnade.

8. Great Lefkadia Tomb: see, e.g., Ridgway 1990, 18587, with bibliography. A second burial was perhaps made at a later time, but the obviously precarious state of the façade under the pressure of the tumulus must have prevented subsequent openings of the tomb. Osada 1993, 316, esp. 1516, supports the interpretation of the frieze as a historical battle between Macedonians and Persians on the basis of the predominance given to the Greeks over their opponents an Amazonomachy, in the author's opinion, would have been more evenly balanced; he also stresses that the costume of the "Macedonians" on the frieze corresponds to that of the tomb's owner, as he appears in the large painting between the Doric columns. Against these legitimate considerations, it can be pointed out that at least one warrior on the Amazon Sarcophagus in Vienna wears contemporary (late 4th-c.) armor, despite the fact that his opponents are clearly mythological. In addition, so much of the Lefkadia frieze

is now missing that it is impossible to tell whether its central portion would have included a more balanced distribution of victors and defeated.

Another monument cited by Osada (2125, DF 11 on p. 154, the stele of Parmeniskos, from Apollonia, second half 2nd c. B.C.E. = *LIMC I*, s.v. Amazones, no. 439, pl. 494) is said to show all Amazons as defeated, all Greeks as victorious, but it is considered part of a new iconographic trend, ultimately influenced by the Gigantomachy, where only the gods win. The same assumption could however be made for the Lefkadia Tomb, albeit earlier, especially given the apparent lack of combat scenes between 300 and 200 (Osada, p. 21). Moreover, I do not read the Parmeniskos stele as one-sidedly as stated. I continue to believe in the heroic character of subjects chosen for funerary monuments, meant to elevate the deceased to the level of epic personages. In seminar discussion, however, Andrew Stewart commented that after ca. 400 only Amazons are depicted on horseback, whereas

their Greek opponents are always on foot. In this case, the Lefkadia frieze would certainly depict a Persikomachy, since some of the cavalry seems definitely Greek.

9. Donald Mastronarde suggests a comparison with the Pindaric victory odes, which were expensive to commission and perform (poet's, dancers/ singers', and musicians' fees), yet could probably be fully understood by few members of the audience at their first performance, given their imagery, wording, and syntax. The elaborate display of embellishments on a building would be due to the same feeling of *megaloprepiae*the magnificence appropriate to a person or to a site-that prompted a sculptor to complete to the minutest detail something that could not be perceived from a distance.

10. Magnesia Artemision: see, most recently, Webb 1996, 8992; also Moreno 1994, 25052, who believes that the Amazonomachy frieze on this temple is among the first figural complexes commemorating the Pergamene and Roman victory over Antiochos the Great of Syria in 190/89 (at another Magnesia that on Mt. Sipylos).

11. On "monotonous friezes," see, e.g., Webb 1996, 3, 2930, and *passim*; Osada 1993, 1560, Cat. D[ekorative] F[riese] 129. Outdated, but still useful for some basic concepts, Ridgway 1966.

12. See, e.g., Boardman 1978, 15859, who considers Master B the more gifted artist who "secured the most conspicuous fields to decorate." La Coste-Messelière 1936, 284436, believed however that the better sculptor was Master A (whom he named thus). Note also the comments on visibility made by an anonymous reviewer, cited in Ridgway 1993, 412, n. 934, and my objections. In general, see Ridgway 1993, 39495 and ns. 9.3339, with bibliography. For reconstructions of the rear view of the Siphnian Treasury in situ, see Daux and Hansen 1987, 224 fig. 132, and cf. the reconstructions of the west façade, p. 225 fig. 133 (hypothetical) and p. 228 fig. 136 (actual remains).

Andrew Stewart has pointed out to me that the temenos of Apollo could originally be entered from a lateral opening just west of the Siphnian Treasury, which would have made its western façade immediately visible and thus more prominent than the eastern. Yet the alignment of monuments along the Sacred Way as we now know it had started at least as early as ca. 500 (Sikyonian Treasury), and probably earlier, given the total re-shaping of the sanctuary after the destruction of the temple in 548. This point is made, e.g., by Daux and Hansen 1987, 4950; *GdDs* 1991, 9399, esp. 97; *BCH* 93 (1969) 744 and cf. figs. 4 on p. 743 (the temenos ca. 545500) and 7 on p. 749 (the temenos ca. 50045 5). Some free-standing dedications by the Knidians (no date given) were placed near the Sikyonian Treasury, presumably between it and the Siphnian, thus further impeding

proper visual analysis of the latter: Paus.  
10.11.12.

13. For this suggestion, see Shapiro [Lapatin] 1988, with bibliography on Pindar's other possible references to actual buildings at the sites of performance. Pindar's 6th Pythian ode is usually dated 490 B.C.E., when the Sicyonian Treasury east of the Siphnian, according to present knowledge, was already built: cf. Ridgway 1993, 365 n. 8.27. On the inscriptions and identifications of themes for the Siphnian friezes, see, most recently, Brinkmann 1994.

14. Brinkmann 1994, 3437, 7880, believes in four, rather than in two, masters, perhaps from different locations but all working at Delphi simultaneously. He would tentatively accept Aristion of Paros as main sculptor for the east and north sides, but with a different workshop each responsible for the di-

vine assembly and the fight on the east side, the Gigantomachy on the north (cf. his pp. 7479) A master from the southern area of Asia Minor was probably at work on the other two sides (p. 80). On p. 96, he notes that the inscriptions on the west side are deeply engraved in the stone, and use an Ionic alphabet, whereas those of the north and east sides are lightly incised and painted and use a northwestern alphabet. It can perhaps be assumed that the (originally only) painted labels needed refurbishing after time, and were therefore engraved and (re)painted in the Delphic (?) script, whereas the deeply carved ones remained as cut by the original masters; but Brinkmann 1985, 109, had excluded re-touching and had declared inscriptions and carvings contemporary. The use of (painted) labels could be influenced by Attic vase painting.

Boardman 1978, 158, seems to imply that inscriptions existed only on the north and east friezes, but Brinkmann 1994, 9597, reiterates that labels occur on all four sides, although the west and south have them only on the bottom fascia and not on the background.

15. Olympia pedimental compositions: Grunauer 1974, with fig. 30 opp. p. 32 (west); Grunauer 1981, pls. 2829 (east; basically, Studnizcka's reconstruction). On the composition of the metopes, see, e.g., Boardman 1985, 38, and figs. 2223.16.

16. This statement is based on the (modern?) inference that a treasury could be more extensively embellished than a temple. Some authors also mention the lack of ancient references to a cult or priesthood of Athena Parthenos; see, e.g., Preißhofen 1984. Contra, or at least more nuanced, Korres 1994, 5657. Some architectural features of the Parthenon, e.g., the greater depth of the pronaos as compared to the opisthodomos, are seen by Harris 1995, 64, as evidence that "the interior was designed with its function as a treasury in mind." She also believes (p. 81) that the west cella (the "Parthenon" proper) was solely devoted to the storage of Athena's treasures in the 5th c.

Note that the Temple of Zeus at Olympia and the Parthenon are almost equally high, and that the Athenian structure, having a wider (octastyle) front and more slender columns, had proportionately smaller metopes (1.20 m. vs. 1.60), so that the discrepancy in scale between the pedimental and the metopal figures was greater than at Olympia. Other Peloponnesian temples, e.g., Bassai and Tegea, seem to have perpetuated the local preference for decorated metopes over the porches, rather than on façade; the one possible exception is the Argive Heraion, which may however be under strong Athenian influence.

17. Parthenon pediments: Ridgway 1981, 4548, and cf. 2023, for similar effects in the metopes; Parthenon metopes: Korres 1991, 839 fig. 3 (E 14), Schwab 1996 (correspondence of arrangements, esp. fig. 10 on p. 90). Selinous, Temple E metopes: Marconi 1994.

18. Bassai frieze: e.g., Boardman 1995, 2324, figs. 5.15, "as an interior frieze they [the slabs] must have been virtually invisible unless there was some lighting through the ceiling"; recent bibliography in Ridgway 1997, 1517.
19. Outer colonnade as frame: Stillwell 1969, with diagrams of position and viewpoints as fig. 1 on p. 233, and fig. 2 on p. 236; an angle of viewing from within the peristyle itself is considered too steep. For my earlier objections, see

Ridgway 1981, 75 and n. 8 on pp. 7576. The second study, Osborne 1987, cites previous comments on the scarce visibility of the Parthenon frieze, and assumes the creative participation of the viewer; Jenkins 1994, 1718, seems to share my reservations. Rhodes 1995, 8992, stresses the processional nature of the frieze composition, in keeping with his general theme of processional architecture on the Akropolis (cf. his p. 44). For recent discussions on the arrangement and meaning of the frieze, see Jenkins 1994 and 1995, Wesenberg 1995, Connelly 1996, Politt 1997, Younger 1997.

20. Wesenberg 1995 suggests that the "peplos scene" in the center of the east section alludes to both the Panathenaia (with the folding, *not* the unfolding, of the garment) and the Arrhephoria (with the two young girls carrying trays with the sacred object over their heads). On the north side, the hydrophoroi would hold vessels filled with the *aparche* to Athena of the coin tribute collected at the Great Dionysia. Other elements of the frieze would show the Perikleian cavalry and emphasize Athenian military policy in both internal and external affairs, in an attempt to legitimize Pericles' ideology and imperialistic approach (cf. summary of main points on pp. 17778). Wesenberg argues that this juxtaposition of diverse subjects is not unique to the Parthenon, citing the Assos architrave and other examples in support. Yet many of his interpretations are based on special readings of the Parthenon carvings and seem debatable.

For another variant interpretation of the Parthenon frieze, as "an evocation of all the ceremonies, contests, and forms of training that made up the cultural and religious life of Classical Athens," and with special emphasis on the newly organized cavalry, see Pollitt 1997 (quotation from p. 63).

21. Settis 1994; the citation is from p. 14; the Platonic reference is to *Rep.* 2.377a-d, on the same page. My interpretation of Settis' thinking may itself misrepresent his initial intentions; see, however, his diagram on p. 17, which graphically expresses the derivation from the non-professional narration of the myth of both the "Discourse" and the "Techne," which then proceed along two different routes.

22. The entire passage (Settimi 1994, p. 13) reads:  
"e si capisce perciò come in anni recentissimi  
una mal digerita moda 'iconologica' abbia preso  
voga fra gli archeologi, fra i quali sempre più se  
ne trovano che, spremendo ad ogni costo dalle  
immagini un succo 'storico', cerchino nei miti un  
riflesso immediato della storia politica e sociale,  
e ciò anche quando incertissime siano le circost-  
anze concrete della commissione e della commit-  
tenza. Per questa strada, l'archeologia perde però  
il vantaggio che pure . . . aveva sulla storia  
dell'arte . . . "

Summers 1994, in turn, seems to advocate an "archaeological" art history by urging a focus on artifacts as such and their stages of manufacture: "In fundamental respects the history of art also belongs to the modern disciplines of indexical inference, and, as the study of human making, occupies an irreducibly important place among them. This definition not only opens the way to many art histories, it also distances the history of art in general from the ingrained textual centrism that perpetuates an obsession with elite cultures and ensures the continued parochialism and derivativeness of art history's interpretative concerns" (p. 591). I owe this reference to Prof. S. Levine.

23. Settim 1994, 1718. The same point is, of course, made by Marconi. To be sure, the author has used all available evidence, both archival and sculptural, examining extant fragments and their alleged findspots. But, in ultimate analysis, his reconstructed sequence of metopes makes sense because he has deliberately arranged it so, supplying whatever was missing on the basis of *logical* assumptions. He is candid in acknowledging the lack of written sources about the rites at Selinus.

24. A similar suggestion has been made for epitaphs, meant to be read aloud as part of a funerary ritual comparable to the praise song: Day 1989, esp. 2122. For Marconi's analysis of connections, see his diagrams and explanations on pp. 308309; cf. also his pp. 31011 for the alleged correspondence between the position of the gods in the metopes and of the temples in the city, and pp. 312 13 for his suggestion of the discourse by *biographical* association of a hypothetical viewer (see *infra*, ch. 6 n. 24), which he compares to the chorus of the *Ion* mentioned here in ch. 1. Marconi does, however, acknowledge (p. 311) that the viewer could not have captured the entire visual program at a glance. The attribution to deities of the various temples at Selinous is still debated as well.

A far more complex program is suggested by Faustoferri (1993 and 1996, esp. diagrams as figs. 3233) for the decoration of the Amyklai Throne (dated mid-6th c.), to which a strong political and tribal content is attributed. Yet it is legitimate to wonder how such an elaborate schema could have been perceived by the casual viewer in its entirety, given its distribution on various locations of the structure according to an external and internal cycle. Moreover, despite discussion of concepts such as "program" and narrative (Faustoferri 1996, esp. pp. 18192), no clear opinion is expressed as to the chain of transmission of the intended iconographic message from sponsor to architect/ sculptor.

25. Bassai frieze: see supra, n. 18. Jorge Bravo has suggested to me that the very perception of at least two different subjects on the frieze might have encouraged visitors to closer inspection, as happened to him during a recent visit to the British Museum.

The theory of the two Amazonomachies is by Madigan 1992; doubted by Boardman 1995. A comparable situation exists on the Archaic Athenaion at Assos, where the architrave carries reliefs with various themes, which would have been much more visible at a glance because in linear sequence and exposed to daylight. For an intelligent attempt at reading a coherent program in the carvings, see Westcoat 1995.

26. Tholos at Delphi: see Ridgway 1997, 4245, with discussion of all decoration; Boardman 1995, 26 and figs. 13.13. A new reconstruction of the roofing system (Laroche 1992) does not affect the metopal situation, but adds the intriguing suggestion that the building was a Wind Sanctuary dedicated by Magna Graecian Thurioi. Perhaps the tholos at Epidaurus adopted a uniform device for each metope to obviate the problem existing at Delphi. In the context of the Berkeley seminar, the suggestion was made that the elements of landscape visible on some of the outer panels may have differentiated the two topics

through the depiction of an outdoor as against an indoor setting. This intelligent proposal cannot, however, be verified in the present state of the fragments.

The Delphic structure had decorated metopes also above the cella wall, behind the outer columns, but their subjects are even more uncertainpossibly Deeds of Theseus and Heraklesand it could be argued that the surrounding peristyle would have provided set frames for the visual compass of a viewer standing outside.

For the existence of disconnected subjects in architectural programs, see *supra*, n. 20 (Wesenberg 1995).

27. Siphnian Treasury friezes: Brinckmann 1994, 17; cf. Daux and Hansen 1987, 173.

Hephaisteion friezes: Boardman 1985, 146-47, figs. 112-114.1-7, with an especially good view of the central scene of the west side as seen through the frame of the peristyle columns: fig. 114.1. Cf. Ridgway 1981, 75 and 85-88, esp. 87 (piers delimiting west frieze); a more thorough analysis of the correspondence of figures to architecture in Ridgway 966. For a recent discussion of the Hephaisteion sculptures, see Delivorrias 1997.

28. This Delian frieze belongs to the so-called Building 42, of uncertain identification, although some scholars consider it a temple of Apollo; on the sculptures, see Marcadé 1969, 47-49; Hermary 1984, 52-54 nos. 29-32, pl. 24.1-4; additional bibliography in Ridgway 1997, 58. A comparable treatment of the joins between blocks, in some cases with the ridges turned into trees, occurs at the Heroon of Trysa, in Lykia, but these landscape elements do not interrupt the narrative, although discrete subjects can appear on the same stretch of wall. Given the anomalous nature of this non-Greek building, however, it is not being considered here; for details, see Boardman 1995, 191-92, figs, 222. 1-11; also Ridgway 1997, 88-94, with extensive discussion.

29. Sikyonian metopes: Ridgway 1993, with discussion of pertinence and chronology on pp. 339-43 and notes; the Argo metopes are III. 31 on p. 342. See also Boardman 1978, 157-58, and fig. 208..

30. Corfu metope: Ridgway 1993, 338 and fig. 126.

31. Treasury at Foce del Sele: Ridgway 1993, 348-50, and esp. n. 8.38 on pp. 369-70, with discussion of proposed reconstructions (the thematic distribution is by F. von Keuren). The latest study is Conti 1994, who discusses the program on pp. 71-82; the quotation in my text is taken from her p. 81; I have also given her suggested chronology. Note, however, that Conti leaves open several possibilities as to the correct attribution of carved metopes to structures. Recent testing at the site has shown that the extant foundations of the Treasury must date after the 4th c., and that the carved metopes were prepared for a building never erected: De La Geniere and Greco Maiuri 1994, esp. 308-13; this conclusion does not affect, however, the intended metopal program. Boardman 1995, 148-49, gives outlines of all panels (fig. 162.1; restored and missing parts are shaded), grouping them thematically and suggesting an improbably low date (530); his figs. 162.2-7 are actual photographs. A

new plan for the building has been proposed by B. Barletta, "Observations on an Old Problem: The 'Treasury' at Foce del Sele," Abstract, *AJA* 99 (1995) 340.

32. Wescoat 1995, esp. 299; the subjects include fighting bulls and wild animals; confronted sphinxes; Herakles wrestling Triton in the presence of fright-

ened Nereids; Herakles at Pholos and attacking centaurs; banqueters. Wescoat specifically addresses the issue of programs in Archaic monuments as contrasted with the "unity" of the Parthenon or the Temple of Zeus at Olympia (p. 293), and emphasizes the importance of architectural sculpture for our studies along much the same lines as mine.

33. Athenian Treasury: Ridgway 1993, 34346, and ns. 8.2830 on pp. 36567, discusses all problems of chronology and its implication, including a proposal (by K. Hoffelner) that would now shift the Amazonomachy to the north side, giving it to Theseus as the battle that took place in Athens, and thus allocating both long sides to the Athenian hero. For our purposes here, this suggestion is not crucial. See also Boardman 1978, 5960, and outline drawings as fig. 213. Bankel 1993, 170, would accept that construction of the Treasury, up to the triglyphs, took place after 507, but was interrupted and resumed, with the addition of some metopes, ca. 480. See also infra, chs. 5 and 6.

34. This earlier suggestion was made in the first edition of my *Archaic Style* (1977) 238 n. 22; see now, however, Ridgway 1993, 36667, n. 8.30. Gauer 1992, esp. 19395, is aware of the excessive emphasis on Amazons postulated for the east façade of the Athenian Treasury, but he attributes it to the importance of the recent historical events and does not question the significance of the akroteria on the west side.

In discussing akroteria in the following pages, I have selected those instances where most of the ancient architectural and sculptural evidence is preserved.

35. Temple of the Athenians: see Wester 1969; Hermary 1984, 2342 nos. 1222, pls. 1121. On the Limyra Heroon, see Boardman 1995, fig. 221; Ridgway 1997, 9499.

36. On this building and its decoration, see Yalouris 1992; Boardman 1995, 2526, figs. 10.15, 11. 13; Ridgway 1997, 3430.
37. Relief with Birth of Asklepios: Athens, NM 1351: *LIMC* 2, s.v. Artemis, no. 1279, pl. 550, and cf. s.v. Asklepios, no. 5 (ca. 350); Ridgway 1997, 200 fig. 53.
38. Temple of Aphaia: Bankel 1993, 5051 (replacement of east pedimental sculpture, including some architectural elements), 50 and ns. 14647 (earlier central akroterion, for which, however, no flanking korai were found). Note that the final central akroterion on the east side was supported by a structure that, in outline, resembled a rampant lion, probably to secure the high ornament against the wind: Bankel 1993, pl. 68, for a section showing the rear support, and pl. 79 for a reconstruction of the east side. Cf. also Boardman 1978, 15657, figs. 206.16; Ridgway 1970, 1317, and esp. n. 4 on p. 15.

Two more instances of sequential reading, albeit in the vertical plane and less securely documented, may exist. The first is perhaps provided by the architectural sculpture of the Argive Heraion (cf. *supra*, ch. 1 and n. 46). Pausanias (2.17.3) states that "the sculptures above the columns represent, some the birth of Zeus and the battle between gods and giants, others the Trojan War and the taking of Ilios." It has been surmised that the *Periegete* alludes to the subjects of the pediments and of the underlying metopes respectively; the "Trojan War" would therefore refer to the metopal Amazonomachy of which fragments remain, whereas the pediment above it showed the Ilioupersis (again, as attested

by fragments). The opposite side would have had a metopal Gigantomachy below a Birth of Zeus (scanty and uncertain remains for both), in the same relative sequence as the Parthenon (Gigantomachy/Birth of Athena). We now know, however, that there were decorated metopes also above the porches, which Pausanias does not seem to mention. Another possible reading of Pausanias' statement, restricting all subjects to the two pediments, is also cited in Ridgway 1997, 61-62 n. 7.

The second instance is based on our interpretation of the inscriptions mentioning figures that would have appeared on the western metopes of the Athenaion at Tegea (Ridgway 1997, 49 and n. 64 with discussion and bibliography). The carvings were made separately and fastened to the background (as for the Erechtheion frieze), so that they are now mostly lost, but the names inscribed on the architrave (Auge, Telephos, perhaps also Aleos) may mean that scenes from the birth and infancy of the local hero were represented. Since the west pediment depicted the battle between Achilles and Telephos at the Kaikos River, the metopes may have shown an earlier, the gable a later, stage in Telephos' life. Note, however, that the decorated panels belonged to the opisthodomos, not to the façade, so that vertical reading at a single glance would have been difficult, if not impossible.

39. The historical/mythological/allegorical interpretation is by Stewart 1985; Felten 1984, 118-31, supports a Trojan interpretation; Stähler 1992, 75-84, suggests the saga of the Heraklidai. For a reading of the balustrade as depicting the sacrifice before battle (the *sphagia*), see Jameson 1994. For the akroterion, see Boulter 1969; she stresses the link between Bellerophon and Athena, who was instrumental in harnessing Pegasos. The corner akroteria were Nikai.
40. Nike akroterion: see Korres 1991, fig. 3 on p. 839; Korres 1994, 61-64 and fig. 8 on p. 62. In general, on the Athena Parthenos, see Ridgway 1992, 131-35. For the frieze, see supra, n. 19. For a global discussion of the Parthenon sculptures in the light of recent finds, see Delivorrias 1994.

41. Himera Temple: see, e.g., *Stile severo* 1990, 77, 82 (on architecture, by D. Mertens); 171-73, no. 8 (illustration and discussion of the two types of lion spouts, with possible interpretation and bibliography), and 174-75 no. 9 (pedimental sculptures, by N. Bonacasa). Good illustrations of the waterspouts also in Langlotz and Hirmer 1965, pls. 77-79.

42. During June 1994, I asked a group of Bryn Mawr College Alumnae/i to comment on the differences. This group of highly intelligent viewers, alerted to what they were supposed to see, stood in front of the waterspouts and argued at length, without being able to reach a consensus on what lions looked more ferocious or more stylized. Some variation exists even among spouts from the same side of the temple: contrast our figs. 23-24, both from the north side. I am deeply indebted to Mrs. Eleanor Fribley Ferris for providing me with photographs of the Himera spouts.



## Chapter 4

### How:

### The Role of Color

In the previous chapters, we have discussed the locations, the thematic sequences, and the often relative visibility of architectural decoration. We should now ask how the general perception of the sculptural message by the viewer might have been increased in other words, what devices were used to enhance programs, unify or separate compositions, and, in general, strengthen the legibility of sculptural decoration. The issue is best addressed by exploring the extent of the role that colors and painting may have played in the decoration of a Greek temple, with particular reference to its sculptured ornament.

This topic is made complex by a variety of factors, two of which are however primary. The first is that ancient painted surfaces, once exposed to the air after years of being buried underground, tend to fade almost immediately; indeed, much color had already vanished before burial, and only ghostly outlines may remain of what once was a colorful pattern. We shall return to the "ghosts" presently.

The second factor is almost a corollary of the first. Since so many ancient structures have come down to us deprived of color, we have become accustomed to "white" buildings and react negatively to painted sculpture and architecture. We respond more readily to the beauty of the material itself whether crystalline marble or grainy wood and dislike the idea of covering such textures with flat paint. In addition, on present taste, we may more favorably accept pastel colors than the vivid, intense hues of many reconstructions that purport to recapture



the original appearance of Greek temples. Yet whatever can be surmised from actual traces would support the belief that ancient coloring, with few exceptions, was indeed bright and strong.

A glance around our cities, especially Washington, D.C., so heavily influenced by the classical revival, yields many examples of lofty pediments filled with completely white images against a white background, which our eye meets with automatic recognition, if not with aesthetic appreciation. By contrast, the Philadelphia Museum of Art, built in the late 1920s when ancient polychromy was no longer doubted or even debated, appears today quaint and garish, although its architectural terracottas look somehow faded and subdued, as contrasted to their initial palette of green, red, vermillion, bright blue, and gilt. In 1983, in her "Introduction" to *Paris-Rome-Athens* (the English version of the 1982 French publication, *Paris-Rome-Athènes*), Barbara Rose seems less kindly inclined in her judgment of this Philadelphia landmark. She suggests that it points toward Post-Modernist architecture because of "its historicist fantasy, scale-less eclecticism and peculiar misreading of the nature

of architectural polychromy" (p. xxiii) critical terms that imply negative connotations. 1

Architectural polychromy today is a difficult subject to research.<sup>2</sup> Attention has usually been concentrated on determining traces of paint on sculpture in the round, and, for the most part, scholars have had to rely on early excavation reports, when such traces were still fresh but not always properly noted or recorded. The use of color to characterize *realia*, to enhance light effects and volumes, or even to imitate nature has also been found somewhat more interesting than its *architectural* function that is, as a means of connecting or separating elements within a structure, or of defining vertical and horizontal accents. A new series, inaugurated by Vinzenz Brinkmann's 1994 book on the Siphnian Treasury friezes, promises to provide more balanced information, but even a recent study by Brinkmann's mentor and editor of the series, Volkmar von Graeve, on the painted details of the Alexander Sarcophagus, focuses on assessing the relative fidelity of such renderings to Persian proto-

types, and thus on the issue of copies in this medium, as contrasted with the more familiar one in the field of sculpture. Certainly, new techniques, such as infrared and macro-photography, raking-light viewing, and chemical analyses will help a great deal in enhancing faded details and increasing our general knowledge.<sup>3</sup>

Another technical help is provided by the computer and its ability to generate information from a data base. This is the method employed by



Valentina Manzelli (1994), who has produced some surprising results; yet she limits her research to the Archaic period, and seems to rely primarily (one could say: inevitably) on published accounts, thus somewhat weakening her conclusions.<sup>4</sup> Her primary interest, moreover, is to trace possible symbolic significance in the use of certain colors, a subject on which disagreement is bound to exist. Another important study, by Elena Walter-Karydi (1986), is equally focused on the Archaic period. Only Paul Auberon (1983) concentrates on architectural painted decoration in general, and even he is reacting primarily to the exhibition of "Envois" by the holders of the Prix de Rome, organized by the École des Beaux Arts in Paris in 1982. An excellent article by Marie-Françoise Billot in the exhibition catalogue outlines the heated controversy that took place in Europe during the eighteenth and nineteenth centuries, and deserves to be briefly summarized to explain the historical

background to our current understanding of the topic.<sup>5</sup>

## The Great Debate

English travelers were the first to note traces of paint on Athenian buildings. By 1780, they had been reported on at least the so-called Theseum (today's Hephaisteion, although not everybody agrees with this identification), the Parthenon, and the Temple on the Ilissos. Stuart and Revett, Pars and Chandler were both authoritative and impartial; their observations were accepted as factual, and are still today a major source of information. But nineteenth-century European scholars, especially the French grouped in the two major academies of the Beaux Arts and of Inscriptions et Belles Lettres, were more impassioned on the subject, either denying that Greek architecture could ever have been painted (although paint on sculpture in the round was accepted),<sup>6</sup> or claiming that ancient buildings were more extensively painted than the preserved traces suggested. This second school of thought was heavily influenced by the discoveries at Pompeii and Herculaneum, which led to the be-

lief that not only ancient private houses, but also religious buildings would have had their wall surfaces, both internal and external, completely covered by murals.

Two major archaeological discoveries were greatly instrumental in promoting this conception: the Sicilian temples, especially those of Selinous, and the Temple of Aphaia on Aigina (in 1811 thought to be that of Zeus Panhel-lenion). At the latter, one of the excavators, Karl Haller von Hallerstein, noted that the floor of the cella, the walls, the Doric

friezes and other parts of the entablature, the pediments and their sculptures, the marble gutters and antefixes, and the roof ridge tiles still held traces of bright colors that faded rapidly on contact with the air. At Selinous, in 1823, W. Harris and S. Angell remarked that the metopes of Temple C had a red background, an upper fascia carrying blue and red motifs, and sculpture with details in reddish brown. 7

The definitive push in the direction not only of acceptance, but also of extensive reconstruction of lost paint on ancient buildings was given by a German-born architect who spent most of his life in France: Jakob Ignaz (Jacques Ignace) Hittorff, who in 1851 published his *Restitution du temple d'Empédocle à Sélinonte, ou l'architecture polychrome chez les grecs*. The naiskos he reconstructed is what today is called Temple B, on the akropolis of Selinous. Little is known about this structure, but Hittorff visualized it as a hybrid, combining Ionic prostyle columns with a Doric entablature. For individual details, he borrowed freely from other Sicilian sites and monuments, and rendered every portion of the building as vividly painted, disregarding differences in periods, styles, and types of constructions.<sup>8</sup> This kind of re-creation of ancient monuments became the accepted procedure for the French architects on travel scholarships to Greece who submitted their works to the judgment of the

Academie des Beaux Arts (col. pl. 1). They often accompanied professional excavators, and a sharp distinction began to be made between the archaeologist, who had to report faithfully on what was found, and the architect, who had the task, indeed the duty, of restoring the lost glories of a past which could be recovered through ancient texts as well as through actual remains. Imagination and interpretation were therefore prized above accuracy and objectivity, with the result that many nineteenth-century drawings, although executed in Greece by professionals, can no longer be trusted, or, in a more positive vein, can only be appreciated for their own sake, as representative of their period and the skills of their authors.<sup>9</sup>

As archaeology became more widespread and progressively more accurate in its approach, more evidence on ancient architectural painting was acquired, and the attempt to prove the validity of one theoretical position over another lost impetus. By the early twentieth century, what had been a hot topic had faded like the colors on ancient stones. Adolph Furtwängler's renewed excavations at the Temple of Aphaia on Aigina produced (1906) one more vividly colored reconstruction (col. pl. 2, contrast fig. 22), based on new observations of the recent finds, but the scrubbed and repaired pedimental sculptures displayed in Munich re-

tained the neo-Classical appearance favored by their restorer, the Danish sculptor Bertel Thorvaldsen, and contributed further to train our eye and taste.

## Current Knowledge

Before embarking on a detailed discussion, a word of caution is in order. It used to be thought that ancient blues, with time, deteriorated into greens; yet it is now realized that such degeneration occurs only when something was applied to the ancient surface after excavation, to preserve its color. Untreated surfaces can retain traces of vivid blue, albeit in folds, grooves, areas close to the background, or other parts less easily exposed to weathering. It seems, moreover, that all ancient colors appear considerably darker today than when first used. Another important observation concerns the prevalence of red on ancient pieces. Although there is no question that red was a dominant color, some details on marble presently seen as painted red might show "imprints of color" rather than actual color, or even a red undercoating for gilding, as occasionally suggested, since the encaustic technique often used for tinting sculpture in antiquity caused the precipitation and penetration of certain hues over

others. In architecture, moreover, when blue/black paint falls off, it is said to leave a red imprint.<sup>10</sup>

Occasionally, nothing at all remains. Painted, uncarved ornaments, which were among the first to be recognized as colored architecture, may now appear solely as slightly raised surfaces, visible under raking light or special circumstances. The contrast with the surrounding areas occurs because the original painted pattern protected the marble from the weathering that affected instead what was left uncovered. These raised surfaces are the "ghosts" mentioned above. At times, such patterns were not only painted but also lightly engraved, as a preliminary stage, so that the painter had a trace to follow. Finally, some ornaments were completely carved, and the paint served simply to enhance them. It is here that the distinction between painting and sculpture becomes blurred. Indeed, some of the Parthenon metopes have the astragal crowning their upper fascia articulated by carving but others have it plain, with the bead-and-reel pattern rendered solely in paint.<sup>11</sup> In this case, the Greek masters

obviously realized that the difference in treatment could not be perceived from the ground and took a shortcut. We have also seen (ch. 2) that the anthemion so beautifully sculptured on

the Erechtheion (cf. fig. 13) recurred on the Nike Temple in a painted version.

That all moldings were painted is also known through Classical building accounts, which specified not only the terms of execution, but occasionally also the creation of models to be followed. It should be stressed that, until the Hellenistic period, the range of buildings employing leaf (vegetal) ornaments was clearly defined: they were strictly sacred structures or those serving cultic purposes, not private or even public edifices, which would suggest the possible symbolic value of some forms of decoration. The predominant colors for moldings were blue and red, but some yellow or even gilding may appear later, and was certainly the tone of the items added in bronze. 12

What other elements of a Greek temple were painted? Auberson answers briefly: only the frieze, the cornice, and the eaves of the roof. He then expands by orders: in the *Doric temple*, the vertical elements (triglyphs, mutules, and guttae) were painted blue, the horizontal ones (e.g., the tainia, the viae) red. In the cornice the corona, at the eaves the cover tiles were enhanced in blue, red, or ocher. In the *Ionic Order*, the same elements as the Doric were painted, with the addition of the moldings framing the continuous frieze, and the egg-and-dart of the echinos on the capital, together with the corner palmettes. On both orders, the moldings on doors, the anta capitals, and the coffers of the pteroma were also picked out in paint.<sup>13</sup> In general, current opinion holds that only the non-structural, non-supporting features of a temple could be embellished by color that is, the transitional or ornamental parts whereas the elements essential to the building were left plain. That the former group could

comprise also functional items is proved by the extensive traces of color found on lion-heads or other forms of waterspouts, including the very colorful terracotta tubes prevalent in Magna Graecia.<sup>14</sup>

What about walls and columns proper? Auberson believes that they were not painted, even when covered with stucco, which could transform poor-grade limestone, like the conchiferous variety common at Olympia, into gleaming marble. Certainly, at the time of the great debate in the nineteenth century, the presence of stucco on ancient blocks was automatically taken as evidence for paint, although it was assumed that such extensive coloring belonged to the infancy of Greek art, the Aigina temple being the earliest known from Greek soil at that time.<sup>15</sup> We now have reason to believe that some Archaic temples, especially in



Magna Graecia, may have had some form of painting on their exterior wall surfaces and on their roof tiles. Wall friezes of the Archaic period, whether simply engraved or in relief, would also have been enhanced by colors. Paintings in the interior of buildings are also mentioned by ancient sources, but many of them could be assumed to have been on wooden boards, like the pinakes in the Pinakothekе of the Athenian Propylaia. On the other hand, stoas and leschai were definitely embellished with murals. More important, for our purposes, is the case of the Temple of Athena at Elis, which Pliny (*NH* 36. 177) describes as coated with stucco to receive paintings by Panainos, a relative of Pheidias. But this source is not explicit enough for us to know whether such paintings were actually executed: they are not cited by Pausanias (2.26.3), and the presence of a chryselephantine statue in the cella, attributed to Pheidias, might have prompted the assumption of paintings similar to those Panain-

os had in fact produced for Olympia. The stucco may rather have served to cover the local limestone, again, as at Olympia. 16

Traces of a yellow-white coloration have been detected on the krepidoma, the columns, and the epistyle of the Parthenon, in the course of the recent restoration, and had already been noticed on some parts of the columns, especially of the west façade, by Penrose, who had attributed the coating to the desire to temper the dazzling effect of newly cut Pentelic marble. Yet not all scholars involved in the consolidation of the Akropolis monuments agree on this point.<sup>17</sup> The many vicissitudes of all ancient structures through different periods make it difficult, moreover, to determine what might be Greek and what Roman refurbishing. In addition, the juxtaposition of different stones and materials (blue and white marbles, limestones, conglomerate, terracotta, even metal and glass) certainly created polychrome effects on buildings that were not due to the use of paint, but contributed to the colorfulness of the whole. We shall return to this point later.

It seems therefore useful to summarize here what little is known about such experimentations *by periods*. Architectural sculpture remains our primary focus, but it shall be seen within the context of the total palette of Greek buildings, with special attention being paid to the tones of the backgrounds. It can be taken for granted that all carved figures, whether in relief or in the round, were enhanced by color in varying degrees, but less certainty exists about the backdrop against which such figures appeared, and which may have had primary importance in increasing their

visibility. Specific questions will then be asked about the *function* of color in architecture, although not many reliable answers may be provided.

## The Archaic Period (Ca. 600-480)

The best evidence comes from the Athenian Akropolis, where a series of poros pediments has retained considerable traces of paint due to the absorbent nature of its medium. The best known among the sculptures is the so-called Bluebeard (col. pl. 3): a three-bodied monster with lower extremities ending in snaky tails, traditionally assigned to an early temple of Athena usually called the Hekatompedon (ca. 560 B.C.E.). The opposite end of that gable was filled with another monstrous creature: Triton struggling with Herakles. Whatever occupied the center of this pediment can still be debated; what matters here is that the background to these high-relief figures was light in tone, either pinkish or yellow, probably close to the original color of the stone. The highly painted actors of the mythical episodes stood out dramatically in all their lively reds and blues against the tympanum wall. Note, in particular, that Herakles' skin was tinted in a warm reddish tone that respected the ancient conven-

tions for depicting male flesh, as contrasted to the whiter complexion of women.<sup>18</sup> The center of the gable was probably filled by two large lions (painted red) savaging a bull (blue, with details in red, especially as blood streaming from wounds, and an unpainted muzzle) (ill. 35a). This elaborate pedimental composition was framed by a marble cornice, the soffit of which was both engraved and painted with alternating designs of birds and enormous lotus flowers, as already mentioned (ch. 2). Other painted patterns covered the corona and the sima, and a marble figural akroterion, also painted, stood between the "tongues" that extended to curl into circles at the corners.

The light background of this gable has been taken for normative in the early Archaic period; a change is supposed to have taken place around 530, that led to a reversal of the color scheme: the background would then have been painted blue with the individual figures standing out against it in lighter tones, with only touches of polychromy for details. Some scholars attribute the reason for the change to the contemporary shift in Attic vase painting from Black- to Red-Figure; others point to an increased preference for marble as against the earlier poros; still others see the blue color as imitative of the sky. Yet probably none of these explanations is entirely on the mark as all of them might have some elements of truth.<sup>19</sup> Particularly significant, in this regard, is the



fact that the matching pediment (west?) of the same early-Archaic templeat least one lioness over a calf, and snakes in the cornershad a blue background (ill. 35b), and so did another gable, the so-called Introduction Pediment, of approximately contemporary date.<sup>20</sup> One more early example, the Hydra Pediment, showing Herakles in combat with the monster, had a light (un-painted?) background, but the so-called Red Triton Pediment owes its name to the fact that not simply the tympanum wall but also the protagonists (Herakles struggling with the sea creature) are covered in vivid red; this uniform, deep coloring is so unusual that it has been attributed to an accident after destruction. The Akropolis has also yielded a gable decorated exclusively in paint (a light-colored lioness walking against a blue background, which includes floral elements), and the so-called Olive Tree Pediment, whose background color is today hard to discern, but which was probably light since it includes a

leafy, engraved tree that must also have been painted to stand out as part of the locale in which the figures move. Since landscape elements are rare in Archaic art, this detail deserves special attention. Not only is it used as a signifier, probably to identify a specific location (most likely the Akropolis itself, with Athena's sacred olive tree), it also is rendered in such a way as to suggest a farther plane than that of the foreground figures rendered in high relief.<sup>21</sup>

On the basis of the above evidence, I would conclude that both dark (blue) and light (pink/yellow or unpainted) backgrounds were used for Athenian gables throughout the Archaic period, although a preference for light figures against a blue tympanum wall definitely asserts itself toward the end of the phase. As in other respects, the sixth century shows itself to be a period of experimentation, open to various influences and possibilities, as we shall see below.

Pediments outside Athens reflect somewhat the same picture. The Megarian Treasury at Olympia (ca. 520-510) had a pedimental Gigantomachy with figures in light colors standing out against a blue background. At Delphi, the Siphnian Treasury, on the east side, had a peculiar arrangement of figures carved in high relief up to waist level, then entirely in the round against a recessed tympanum; I know of no traces of color for this gable, where the upper background must have been difficult to see, given the shadows projected by the foreground figures.<sup>22</sup> Furtwängler mentions that the west tympanum of the Alkmeonid Temple of Apollo, although in poros and in high relief, was given the same treatment as the east gable, which was in marble and held free-standing marble sculptures, but he refers primarily to the sparse coloring of the

statuary and does not specify whether its background was painted blue or left unpainted.<sup>23</sup>

The pediments providing the best information, including the coloring of the surrounding entablature, are the two finally installed on the Temple of Aphaia at Aigina. Scholars agree in accepting Furtwängler's reconstruction in its basic lines, which was confirmed by more recent investigations: light marble figures, entirely in the round, with many red and blue accents in paint and metal additions (cf. col. pl. 2, fig. 27), moving against a cobalt-blue background, on an earth-red floor. The frieze below had dark (black) triglyphs but the red metopes reconstructed in between them were not based on actual evidence. It has now been argued that they originally carried sculptured decoration but were removed in antiquity, presumably for the art market.<sup>24</sup>

Pediments elsewhere do not provide much evidence: we have no large-scale sculptural compositions from Asia Minor, and in Magna Graecia the main color is provided by the architectural terracottas that both frame the triangular area and constitute the central embellishment, most often a gorgoneion. The terracotta plaque with the entire Gorgon holding Pegasos, from Syracuse, has been considered either a ridgepole revetment, therefore almost an akroterial rather than a pedimental decoration, or a metope; at any rate, the figures appear against a blue background.<sup>25</sup>

Archaic stone metopes are better represented in Magna Graecia, where a red background was noted for those of Temple C at Selinous (ca. 540), as mentioned above, and a blue one for the metopes of the Temple of Hera at Foce del Sele (ca. 510). Those of the Athenian Treasury at Delphi are said to have had red-orange plinths (baselines) and probably blue background. I know of no other certain example, although it is traditionally believed that the background of Archaic relief metopes corresponded to that of votive and funerary reliefs: red in the early stages, blue toward the end of the period, as for the gables. The terracotta metopes, often mentioned as among the earliest examples of the decorated Doric frieze, partake of pictorial rather than of sculptural traditions, in having well outlined images enhanced by color against a light background.<sup>26</sup> They therefore cannot provide helpful information for carved examples.

We are better informed about continuous friezes, which are best represented by those of the Siphnian Treasury at Delphi. Brinkmann's recent study (1994) has provided a thorough, modern examination of all evidence, and only specific points will be summarized here.



The background of all four friezes was painted blue, but the west and south sides had a lighter tone than the north and east (cf. ills. 16 and 24). Brinkmann does not suggest it, to my knowledge, but since the difference in intensity corresponds also to that in carving techniques (the work of Master A versus that of Master B), I wonder whether the two shades were meant to underscore the change of hands, or were required by the greater and lesser "legibility" of the respective compositions. The bottom of the frieze slabs is marked by a low fascia, which serves as the groundline for the actions above. It is painted red, as a normal *architectural* element, but its upper surface, at least on the east side, is in reddish-brown and extends up into the blue background for approximately 2 cm., thus producing an illusionistic effect of recession in space. A comparable three-dimensional effect is achieved through the foreshortening of the wheels on Memnon's chariot, on the east frieze.

Since they were first outlined by incision, and then painted, there is no question as to their appearance. This point is important not only to demonstrate the use of this pictorial device in sculpture by the last quarter of the sixth century, but also to emphasize that even major features of the composition, not just small details, could be indicated solely by paint.<sup>27</sup> Metal attachments were also used, in combination with painted renderings. It may bear repeating in this context that labels were painted a bright red against the blue background of the north and east friezes, whereas those engraved on the baseline fascia (on all four sides) were ocher colored, to contrast with the basic red.<sup>28</sup>

One more site has provided scant evidence for background painting. At the Ephesian Artemision (cf. ill. 4), the column-drum figures stood out against a red background, whereas those of the parapet contrasted with a blue one. This change in colors has been attributed to the amount of time elapsing between the execution of the two elements, the later one therefore following the fashion introduced in the late sixth century.<sup>29</sup> I wonder, however, whether the difference lies instead in the type of frieze, that around the columns being limited in scope and not perceptible at a glance, that of the parapet being part of a continuous zone that extended for some distance. I shall return to this suggestion later.

For the entire Archaic period, it is obvious that colors are not meant to reflect nature but to provide contrast and legibility. The palette is limited to three basic tones light, dark, and red used in alternation or in opposition (Walter-Karydi's polarity principle), to distinguish figures among themselves or from the background. Realism, in the face of blue

bulls, red lions, and even green horses, is out of the question. Scholars agree on these basic points, but diverge in their understanding of ancient color symbolism: Walter-Karydi would deny that any existed, beyond a desire for coloristic effects; Brinkmann and Manzelli, however, believe strongly in the meaning of various hues, the Italian scholar being particularly emphatic in her anthropological approach. She maintains that black/blue is a heavenly and male color, used in combination with red, which stands for chthonic and female values. Their juxtaposition would express the dynamic contradiction of the universe.

30

The Classical Period (Ca. 480-400)

Greater naturalism in the use of colors seems apparent during this phase, although the basic palette does not change; it is simply used more sparingly. The various anthemia continue to be painted in alternating blues and reds, without attempts to suggest the green of real plants. Gilding is now added more often. The high coloring of the guilloches in the Ionic capitals of the Erechtheion North Porch has already been mentioned.<sup>31</sup>

At Olympia, traces of color on the Temple of Zeus were recorded by various observers, and are extensively listed by Treu (1895), but some are based on presumed analogies with other buildings or on alleged practices. For instance, although no traces are preserved, the plinths of the various pedimental sculptures are assumed to have been painted red; and since red tones predominate on the figures themselves (the Apollo on the west gable had his mantle entirely painted in that color, rather than just enhanced by details), the background "must have been blue." Better evidence, although contradictory, exists for the metopes (cf. ill. 26b). The episode of the Cretan Bull had a light blue background against which the enormous beast stood out in red, and another (in 1895) unattributed fragment of background showed a similar tint. The Hydra metope, however, had a red field. It has therefore been thought that the two colors alternated from panel to panel suggestion even extended to the

Parthenon metopes.<sup>32</sup> At present, the two metopes cited have been assigned to the west side, but it is generally agreed that some shifting of panels occurred during one of the many repairs to the temple. Perhaps all the metopes over the pronaos had a different background from that of the opisthodomos panels, thus distinguishing by location. I would find it harder to believe that the two colors served to differentiate the Peloponnesian from the non-Peloponnesian Labors,

but the possibility cannot be excluded, given the alleged international tone of the sculptural program.<sup>33</sup>

In Athens, the Hephaisteion may have used a red background only for its sculptured metopes; those without relief decoration are said to have been plain. Were the carved panels better protected from weathering by their reliefs, thus retaining more obvious traces? Or was this color contrast among the two types of metopes meant to emphasize the alignment of outside sculptures and interior (pronaos) frieze on the east side? The latter retained traces of color in 1953 that could no longer be seen by 1974. As traditional, the palette was limited to blue (including the background), red, and green, this last color appearing specifically in depressions of the rocks on which the gods sit, thus providing indirect confirmation for the "landscape" rendering on the Parthenon, to be mentioned below. The tympanum walls are assumed to have been red, but show no color traces.<sup>34</sup>

The Parthenon provides scant evidence, especially the Elgin marbles that have been repeatedly cleaned. We have already mentioned one theory on the background of its metopes, but Bruno (1981) makes a powerful case to defend Dinsmoor's contention that Classical metopes were left plain. His supporting evidence comes from an unexpected quarter: the Great Macedonian tomb at Lefkadia, (col. pl. 4) which dates from the turn into the third century B.C.E., but seems to reproduce some of the Parthenon south metopes, albeit solely in paint. This building is so important for our analysis of architectural polychromy that it should be examined in detail.<sup>35</sup>

This Macedonian tomb is typical of other such constructions in that its façade does not reflect the actual articulation of the rooms behind it, especially the barrel vault of the burial chamber. It consists of a lower story of four (engaged) Doric columns in antis, with a regular Doric entablature in which carved triglyphs painted in blue alternate with metopes depicting a Kentauro-machy, below a blue fascia. A cornice with dark mutules and light viae is topped by a painted corona (with anthemion pattern on blue background), and forms the baseline for a continuous Ionic frieze, where stucco figures with various touches of color (red, green, and yellow, some of them in Oriental attire) stand out against a deep blue background and act on an earth-colored floor. Above this Ionic frieze runs a series of six Ionic columns in antis (against a red background), with intercolumniations filled by large studded doors (or shuttered windows), a two-fas-

ciaed architrave, a purely painted dentil course (light against a dark background), and a

large pediment with a deep blue background, against which traces of stucco figures in relief were found. The continuous frieze and the pediment confirm the background coloring that had become common at the end of the sixth century; the metopes introduce novel evidence.

Bruno has argued that the figures painted against the plain background are meant to imitate the Parthenon south metopes, in the faded colors that would have been familiar to viewers of that building around 300 B.C.E. Lapiths and centaurs are rendered *not* in monochrome, as sometimes described, but with a range of highlights and cast shadows that are skillfully produced by yellow, orange, pink, violet, and gray washes and strokes. Most importantly, all colors are muted, as contrasted with the vivid paint of the other decorations.

To be sure, although comparisons can be established between three of the best preserved Lefkadia metopes and three from the Parthenon (S 3, 7, and 27), there is no complete identity: poses have been reversed, overlappings changed, details omitted or simplified. Yet the basic patterns are close enough to allow recognition, especially from memory. The quotation seems intentionaleven if the tomb front would be exposed for only a short time before being buried under a tumulusin a Macedonia that was always eager to import artistic excellence from elsewhere. Some doubts may linger because the total Lefkadia façade is closer to a work of painting than to one of architecture and sculpturenot only the engaged columns, the improbable levels of orders and doors, the illusionistic effects of some architectural details, but especially the human and divine figures standing on a balustrade within the Doric intercolumiations, which are purely pictorial in their rendering, without cast shadows or major

foreshortening, and with painted labels above their heads. Yet the basic characteristic of Macedonian tombs is their architectural articulation, for which no specific prototype may exist but whose vocabulary is certainly based on contemporary practices.<sup>36</sup>

Should we accept the evidence of the Lefkadia Kentaumachy, the south Parthenon metopes could then be visualized as having a plain marble background against which Lapiths and centaurs stood out in the vivid colors of their costumes, pelts, and accessories, rendered both in paint and in metal. Bodies would have been tinted, the equine as well as the human, with a two-tone combination for the monsters, a warm fleshy shade for the men, and a lighter skin tone for the few women. Similar color schemes should then be assumed for the metopal sequences on the other three sides of the temple. As for the blue tympana-

num at Lefkadia, I am not sure it can be considered as significant as the metopes. Since its composition was in stucco relief, it could not take advantage of cast shadows and other pictorial devices; moreover, it could not have reproduced any Parthenon subject, inappropriate for its function. The Kentauroomachy, with its heroic connotations, was instead well suited to the brave tomb owner.

Given the depth and height of the Parthenon gables, and the size of the pedimental sculptures, whose heads and limbs often projected beyond the frontal plane, the tympanum walls might well have been left plain. Pictorial touches were created, as already mentioned, by the chariot of the Sun rising from the cornice at the southeast corner, and the Moon's horses sinking into it at the northeast. Yet the gable floor was at too high a level to have been visible from the ground, and may not have been painted. As evidence, we can cite that Helios' powerful torso and his horses' protomai were made to emerge from a high plinth sculptured with rippling forms imitating sea waves that would undoubtedly have been painted blue and been perceivable from a distance. The west pediment seems less impressionistic in its present state, yet the central scene, now totally missing, would have included the olive tree of Athena, perhaps some rocks with water flowing blue under the shining trident of

Poseidon, or even as the habitat of the peculiar sea-monster drawn by Carrey and reconstructed by Yalouris. In the center, according to Erika Simon, a flaming thunderbolt may have been rendered in metal, as Zeus' signal for the warring contestants to separate. Elaborate crowns, earrings and other jewelry, as well as colorful garments, would have completed the spectacular effect of both gables. 37

The Parthenon frieze is said by many early observers to have had a blue background, with details in different colors, including some green petasoi. Gilding on the hair and some parts of the body was noted by A. L. Millin in an 803 publication. Various rocks on the groundline were said to have been painted green, and have been used to reconstruct a specific route for the procession, as well as an indication of Olympos under the feet of the gods on the east side. The latter, however, may have been distinguished from the humans in the frieze through a different device: a change in background color, as suggested by Lethaby in 1929. This intriguing possibility could have great significance for the legibility of the scene, indicating two different spheres of action by the use of two different tones, and thus providing for the ancient viewers clues that are totally lost for the modern observer. Another aid to visibility must have been supplied through contrasting hues for the overlapping horses of



the north and south sides, now difficult to distinguish in their colorless jumble of legs and head profiles. Color scansion would also have helped the viewer in detecting the faster or lower pace of the movement. Brommer, however, could see no traces of color in his close study of the frieze.

That Athenian friezes of the fifth century had a blue background is confirmed not only by the evidence of the (slightly later) Hephaisteion, but also and especially by the Erechtheion (cf. fig. 10). This temple presents a special case, in that the background of its friezes was not painted but built of Eleusinian dark stone against which separately carved figures in white marble were applied. This technique has resulted in the virtual impossibility, today, of safely reconstructing the subject of the two friezes of which that over the north porch was somewhat higher than that around the cella, and therefore probably distinct from it, with appliqués on a larger scale.<sup>39</sup> The use of a background in different stone has been compared to cult-statue bases, of which several were made in this fashion during the fifth century: for the chryselephantine Zeus at Olympia, probably for the bronze Athena and Hephaistos in the Hephaisteion, and perhaps even for the gold-and-ivory Athena Parthenos, where at least

a crowning molding may have been in Eleusinian dark stone. The blue tone of the Olympia base may have been imitated at Epidauros for that of the fourth-century chryselephantine Asklepios by Thrasygmedes of Paros. Certainly, Perikleian Athens saw a great deal of experimentation with dark stone, although the practice may have started under the Peisistratids. I shall suggest a possible reason for its use on friezes in my conclusions to this chapter.<sup>40</sup>

Whatever else chryselephantine cult statues and their bases may have contributed to architectural sculpture, they probably did inspire the use of gilding or gilded ornaments. Appliquéd figures covered with gold foil (as reconstructed on the base of the Athena Parthenos by Alan LeQuire in Nashville, Tennessee) and the many narrative elements in gold on the statues themselves (like the Kentauroomachy on the Parthenos' sandals) must have exerted a great impact on the viewers. I shall again mention here the gilded bronze akroteria for the Nike Temple: a central Belleroophon on Pegasos killing the Chimaira, flanked by corner Nikai. They certainly stood against a blue background the Athenian sky, in pre-pollution days. Allusion to the sky must have also been meant by the blue coffers studded with bronze stars in the Erechtheion and other buildings.<sup>41</sup>

One final example should be mentioned for the fifth century, since it will lead us into the fourth and its changes. Yet here again we deal with non-Greek monuments without true architectural nature: the Sidonian sarcophagi.

Although their chronology is debated, two of these decorated royal caskets from North Syrian Sidon have been traditionally dated before 400: the so-called Satrap's and the Lykian sarcophagus. The first is closer to a standard chest or casket, with only the lid exhibiting the three fasciae of an Ionic architrave topped by palmette akroteria; the second has a high-swinging lid in the shape typical of Lykian tombs, which resembles a boat upside down. On the short ends, this high lid has ogival "pediments" decorated with heraldic sphinxes and griffins respectively. Both sarcophagi are said to have had a blue background, against which figures stood out in light colors with red accents for details, thus repeating the basic Archaic palette of dark and light tones with red as third contrasting element.<sup>42</sup> This range is considerably enriched on the two later sarcophagi from the same tomb.

The Late Classical Period (Ca. 400-331)

The Mourning Women Sarcophagus is the closest to a Greek temple among the Sidonian caskets. It has a peristyle of Ionic columns with corner antae, a three-fasciaed architrave surmounted by a dentil course, a pedimented roof with lion waterspouts, sphinxes as lateral, and palmettes as central, akroteria over figured gables, and a roof parapet that recalls that of the Archaic Artemision at Ephesos (cf. ill. 4) and serves as background for the funerary procession. In the intercolumniations, women sit or lean against a balustrade in mournful poses, thus giving its name to the casket. The total temple-like structure sits on a profiled socle decorated with a hunting frieze in very low relief. Although the person buried in the sarcophagus was certainly local, the style of carving is Greek, with strong influence from Athens and its funerary repertoire. Its polychromy was strong at the time of discovery, although it is now badly faded.

The predominant architectural color was cobalt blue, including the background to the women above the balustrade; the Ionic capitals were painted, the geison had an egg-and-dart pattern in color, the sima a palmette chain. The balustrade itself was unpainted, but its top molding/ledge supporting the mourners seems to have been in different tints, and

it was once suggested that red/brown and yellow ochre colors alternated; a recent analysis has however confirmed the same color for at least two adjacent panels. The socle frieze had an unpainted background, yet it looked more colorful than other areas because the figures themselves were painted and were densely spaced within a narrow zone. It is in the coloring of the figures that the innovations occur, with violet making its appearance, as well as pink, brown, and yellow in different shades. The rocks on which the pedimental mourners sit were, once again, rendered in green, and the latter's skin had a yellow or reddish tone different from that of the other figures to suggest a different ethnic group or nature?

Little else remains as hard evidence from the buildings of this period, and many are non-Greek. In 1852 Charles Fellows published his *Travels and Researches in Asia Minor* and mentioned that he had detected traces of color on the Lykian rock-cut tombs of Myra and on fragments of the Nereid Monument in Xanthos, now in the British Museum (cf. fig. 14). The latter building also had painted figured coffers. Another major structure of the mid-fourth century, the Halikarnassos Mausolleion (cf. ill. 22), although Karian, was erected and embellished by Greek architects and sculptors. It too had decorated coffers, with relief figures against a blue background. Its tall podium was crowned by a relief frieze depicting an Amazonomachy: its background was blue, and the figures had red-brown or white bodies clad in green or yellow drapery. Most importantly, of the three steps of the podium, the middle one was in dark stone, against which stood a series of colossal figures in the

round, engaged in hunt, battle, and sacrificial procession. The effect, albeit on a much larger scale, was probably similar to that of the Erechtheion friezes.<sup>44</sup>

Finally, some Greek temples. At Tegea, in Arkadia, the metopes over the two porches of the Athenaion (ca. 340 B.C.E.) had appliquéd figures, like those of the Erechtheion friezes, but, to my knowledge, no background color was observed on the slabs. Since the dowels fastening the now lost carvings appear staggered, and the inscriptions identifying the metopal figures, on the architrave below them, are on different levels, it has been suggested that the original composition was pictorial in nature, with figures on several planes implied by their higher or lower location within the panel.<sup>45</sup> I have been unable to find evidence from Epidaurus, despite its notable building activity during the fourth century. In the Asklepieion, silver, gold, and ivory were used on door and ceiling, presumably against dark wood; paint would also have helped to distin-

guish covered from uncovered limbs in the three-dimensional sculptures, especially the central akroteria (cf. ill. 19), where the flamboyant renderings of the "Rich Style" make the distinction ambiguous now that all color is lost. In the Tholos (cf. ill. 23), the metopes carved with elaborate phialaia single repetitive motif executed in great and fine detail may have had the latter gilded or painted yellow, in imitation of metal prototypes, but I saw no mention of their color scheme. Certainly, the flowers of the interior coffers would have been enhanced by paint, especially in a building that included very elaborate Corinthian capitals and a black-and-white floor.<sup>46</sup> At Priene, in Asia Minor, the mid fourth-century Athenaion had sculptures only in its carved pteroma coffers, which also had a blue background and some gilded moldings; the figures depicted a Gigantomachy and perhaps also an Amazonomachy.<sup>47</sup>

We might close this review of Late Classical times with a glance at two monuments employing colored materials for architectural contrast. The first is the Lysikrates Monument in Athens (precisely dated to 334 by its inscription) (col. pl. 5). Although the structure could not be entered, and was simply a glorified support for the bronze victory tripod that stood on its *akanthos* finial, this choragic monument embodies some of the coloring principles of the time: its tall, square podium is in yellowish limestone with a crowning molding in blue Hymettian marble, its tholos in white Pentelic marble, but the intercolumniations are filled with slabs of blue stone up to the level of the Corinthian capitals. The space between such capitals is in turn blocked by white marble slabs carved with relief tripods. The three-fasciaed architrave and the continuous frieze are made from a single block, but the figured scenes are so damaged by exposure to the elements (which caused the warm patina typ-

ical of aged Pentelic) and even by fire that the most recent study makes no mention of traces of paint. The composition (Dionysos turning the pirates into dolphins) has widely spaced actors in a landscape with trees, rocks, and even sea waves that must have required their own blue color; yet I find it unlikely that the background was left plain, in anticipation of Hellenistic developments. Such small-scaled figures would require a contrasting backdrop for proper visibility. A (perhaps overly) imaginative reconstruction would add bronze figures around the finial.<sup>48</sup>

The second monument is the Temple of Aphrodite (?) at Messa, on the island of Lesbos (ca. 340-320 B.C.E.). A pseudodipteros with 8x14 plan, it is poorly preserved and includes no sculpture, but its frieze course was in red conglomerate, a breccia-like stone whose use is comparable to that

of the blue limestone of the Erechtheion frieze in terms of providing contrasting accents in the entablature. Its cella walls and columns, in fact, were in cream-colored volcanic liparite, and its sima was of white marble. This color scheme obtained in the interior as well, where the inner core of the cella was in reddish trachyte, including the columns in antis, whereas creamy liparite was used for their capitals and bases. 49

## The Hellenistic Period (Ca. 331-31 B.C.E.)

A major change in ancient polychromy is generally said to have taken place at the time of the Alexander Sarcophagus (cf. figs. 1-2).<sup>50</sup> It consisted in leaving all backgrounds plain and in painting all figures with an array of colors no longer flat and vivid, but pastel and highlighted or shaded, with violet/purple and yellow playing a major role. The old alternation of reds and blues was now entirely omitted and no green was used on the entire casket; white and black served only for some details. The pedimental fields were also left plain, with items of armor and other objects purely painted on the background. Only Alexander's horse was tinted in yellow/brown all others and even the lion of the hunt scene were left in the color of the marble, which made the spurting red blood appear all the more dramatic. Many interiors of shields, in place of a uniform red coloring, were given figured scenes that have been shown to copy Persian motifs and even specific prototypes. Horse saddles, under

special lighting, have revealed additional figural details that can be matched in metalwork from the Achaemenid sphere. The similarity between compositional units of the sarcophagus and hunting or battle scenes in mosaics suggests not simply the use of pattern books (partly deriving their repertoire from Red-Figure vases) but also the desire to make a work of sculpture look like one of monumental paintingan impression increased by the plastically rendered, uneven groundline. Realism and naturalism appear to have been real concerns, with the Orientals' skin rendered a shade darker than Greek complexion. Even "moldings" may have partaken of this intent: the vine leaves below the dentil course, on the lid, were painted yellow against a purple background, with a color scheme that has been said to imitate nature rather than being an abstract rendering.

Once again, we can ask the question: can a Sidonian sarcophagus be taken to be the norm for contemporary Greek architectural sculpture? And the same guarded answer should be given: perhaps. Little else remains to support all claims. The only other monument with well pre-



served polychromy at the time of discovery (because of the nature of the ruins, caused by an earthquake) seems to negate the assumption; it is, moreover, not a temple but a tomb, the third-century Mausoleum at Belevi (cf. ills. 13 and 21).<sup>51</sup> Although some disagreement remains about its precise chronology, the intended occupant of the burial chamber, and the reconstruction of the upper levels, the basic articulation of the structure is clear. Its upper peristasis has yielded a series of twenty-four coffers carved with scenes in high relief (a Kentauroomachy and athletic competitions), where light, unpainted bodies stood out against a cobalt-blue background. Details and garments were mostly red, only the auletes of coffer N 3 had violet-brown drapery. In the Kentauroomachy duels, Greek helmets and shields were a light yellow, the latter occasionally rimmed by a red pattern and, when visible, a red interior surface. All colors were solid, without the pastel tones and the shading so typi-

al of the Alexander sarcophagus, and showed no pictorial intent. Definitely later than the Sidonian casket, these coffers have been considered retrospective or retardataire. Certainly, the Kentauromachy at Belevi recalls the Parthenon south metopes, although here the Greeks have contemporary armor and appear as soldiers, not as surprised banqueters; but the blue ground may be typical of coffers because of their position, rather than because of traditionalism.

The anthemion frieze above the Corinthian peristasis (ill. 36) also had a (traditional?) blue background; the alternating palmettes and flowers over addorsed volutes seem to have been unpainted except for the red rim of the flower calyx; red also marked the eyes and the upper edge of the volutes. In the Doric entablature, as customary, the mutules were blue and the viae red. By and large, therefore, red and blue predominated, and the subsidiary colors were few, in a virtual return to the Archaic palette. The Corinthian capitals had a greater range. To be sure, the Lesbian-leaf pattern (cf. ill. 3E) of the abacus (which was only painted) repeated the alternation of red and blue. The central kalathos was again blue, its top fascia red; red were also the eyes of the central volutes.<sup>52</sup> But the vegetal elements were more colorful: the inner part of the akanthos leaves was red, the outer green, and the fleuron was yellow with a red-yellow core. It is regrettable that little is known about the poly-

chromy of other Corinthian capitals whether the relatively late appearance of the type within the architectural repertoire allowed it greater naturalism because unshackled from tradition. From Rome, we hear of a stoa with bronze capitals, but the definition of Corinthian may apply to the alloy rather than to the order.<sup>53</sup>



Hellenistic figured friezes have left no evidence, or none has been observed. At Taras, where funerary structures use the entire gamut of architectural sculpture and the soft stone might have retained more traces, little has been mentioned, beside the occasional gilding in keeping with the taste of the area. Friezes often used the appliquéd technique of the Erechtheion, and therefore yield individual figures without a background.<sup>54</sup> At Pergamon, we can safely assume that the Telephos frieze had pictorial enhancement of landscape features, such as rocks and trees, and of interiors, with piers and hanging curtains, especially given the usually ample overhead space. We might imagine further that a change in scenery and locale was accompanied by a different shade of background, to aid the viewers in the reading of a continuous frieze where some personages were repeated from one episode to the next. Yet even so, the total appearance of the frieze, with its receding planes implied by modulated depth of

carving, would have been closer to a monumental mural than to architectural sculpture, for all its columnar peristasis.<sup>55</sup>

By contrast, the Gigantomachy on the podium (cf. fig. 12) is in such high relief that background becomes almost irrelevant,<sup>56</sup> but coloristic effects would certainly have emphasized figures and attributes. Note, for instance, (fig. 28) the flaming thunderbolt of Zeus that pierces a Giant's thigh and is shown diffused against the interior of his shield. Perhaps the same effect was suggested for the thunderbolt once held by Zeus' raised right hand: its light might have been caught by the eyes of Porphyzion, one of his opponents, once inserted in red glass. Or, if empty, the Giant's hollow orbits may have been read as indication that his eyeballs had been plucked by Zeus' eagle fighting next to him; red coloring would have gruesomely suggested spurting blood. Given the many textural effects of the entire frieze, and its almost excessive attention to details, the assumption of skillful and *realistic* coloring can be made with safety; the occasional uneven groundline may have compensated for

the absence of background features. One final comment: the Giants' names were engraved on the molding below the figured zone, those of the gods, in larger letters, on the cornice above, with a practice that recalls the Siphnian Treasury, approximately 350 years earlier! It has been suggested that the Late Hellenistic period, which favored literary and often obscure subjects, (re)introduced inscribed labels.<sup>57</sup> This custom could be marking a shift in emphasis from visual rendering to text, within a more literate and sophisticated, or simply more ethnically

varied culture. But I could also see it as a return to Archaic formulas, perhaps in an intentional evocation of a golden past.

My last example concerns the Stoa of Attalos in the Athenian Agora (ca. 150 B.C.E.), an impressive two-storied building reconstructed in its entirety by the American School of Classical Studies in the 1950s, which is, now as in antiquity, a testament to material polychromy. Its foundations are in reddish conglomerate, its steps of Hymettian (bluish) marble, but the whole façade is in white Pentelic, with a red (terracotta) roof trimmed with marble tiles and antefixes at the eaves. Past the front columns, the walls are in hard grayish poros over Hymettian orthostates, and that same dark stone is used for the door frames and other trimmings in the lower story. Here, however, I want to focus on a single detail, seemingly unimportant, but one that I could witness in person, during my student days in Athens. When the newly rebuilt stoa was completed, only one of its elements was painted, on the basis of solid evidence: the interior of the scale and net patterns covering the balustrade

panels in the intercolumniations of the upper story. Both motifs are outlined by a relief border that was left in the color of the marble, and which appeared like a lace tracery once the blue ground was added, producing an à jour effect, as if the sky could be glimpsed through open work. What was before an almost blinding expanse of undifferentiated, newly cut Pentelic became suddenly a grille of great delicacy and airiness, suggesting open spaces behind. It made me appreciate the importance of the use of paint on freshly quarried crystalline stone, and gave me a good idea of the unifying value of color across a front.

58

## Conclusions

This subtitle may beg the question. How can anything be concluded on such scant evidence, over such a long span of time? Rather, this is the place for a few final comments and questions, and for some tentative suggestions of my own.

Why did the Greeks paint their architectural sculpture? Certainly, at its inception, the practice had no naturalistic aims,<sup>59</sup> but simply the purpose of distinguishing elements of the decoration, both architectural and sculptural, through contrast of light and dark. Since colors were used, those most accessible and most easily perceptible were chosen. It has been pointed out that red, for instance, was locally obtainable and



was therefore cheaper than other coloring substances; it was, however, according to Manzelli, also highly symbolic because of its identification with blood and life, common to all primitive cultures.<sup>60</sup> Whether symbolism attached to all other tones, however, is debatable, and we may be influenced by our modern understanding and interests. I would accept the concept of polarity stressed by Walter-Karydi and partly supported by reference to colors in the ancient sources, especially Homer. Above all, the total effect of an Archaic building was lively and cheerful, even when gruesome scenes (the killing of prey) were included. Such bright tones, we should remember, were to be seen in a Mediterranean context, where the sky is very blue and the sea even bluer—not the faded green of the Atlantic Ocean—and the sun is brilliant and the stones are sparkling. It is because of this intense Greek light, however, that I would put the greatest emphasis on the purpose of articulation and connection, since I

see color, almost like moldings, providing horizontal and vertical accents of great legibility across a structure.

One of the most intriguing aspects of Greek polychromy is in fact the use of background colors for architectural sculpture. This is a practice the Greeks could not have derived from other cultures. The Egyptians used a uniform pale tone for their walls, against which the figures moved as if painted on boards, and naturalism had a limited currency as compared to the intellectual picture. In Assyria, the carved orthostates, when first unearthed, revealed touches of colors on the figures, but the background showed no traces of paint even when they were preserved elsewhere, and is presumed to have been left unpainted. The same comments seem to apply to Persian reliefs.<sup>61</sup> Yet in Greece, from virtually the very beginning, we find red and blue used as a backdrop against which the figures stand out.

One possible influence may have been entirely local: the theater. Certainly, drama had a major impact on contemporary storytelling as well as on the understanding and shaping of myth. We have already discussed the possible repertoire of patterns and poses that plays and rituals may have lent to the visual arts. But theatrical performances may also have contributed a familiarity with (almost an expectation of) actors moving against a uniform background. As we know from Vitruvius (1.2.2), Agatharchos of Samos is supposed to have introduced *scaenographia*, which is understood as a form of perspective painting for stage sets. Posch has now argued that an instance of foreshortening in the Parthenon frieze, as already mentioned, may reflect a Pheidian intervention that would precede that of Agatharchos, so that influences may

have moved in the opposite direction. Yet, to be sure, theater performances took place before both Pheidias and Agatharchos, and, on the other hand, the architectural sculpture of their own time does not employ the realistic settings that seem implied by the alleged fifth-century staging developments. We could visualize early theatrical representations as using either a plain set (a curtain or a tent, perhaps even the sky) or an architectural feature like a stoa, without elaboration, which might have suggested a comparable arrangement for architectural sculpture. Yet I believe that the use of colors in architecture responds not to an imitation of contemporary practices but to a basic architectural principle.

Perhaps the issue has been clouded by the fact that the polychromy of sculpture in the round has been discussed together with that of architectural sculpture. But the two manifestations are different, although they share some common elements. Primarily in Attika, for instance, during the Archaic phase, the tectonics of the human body are made apparent by grooves and modeling in a way that resembles the articulation of a structure.<sup>62</sup> It is this kind of articulation that paint on architectural members contributes to highlight and explainnot in terms of a literal translation from one medium (wood) to another (stone), which is by now an obsolete theory, but in terms of uniting similar members and creating correspondences that may otherwise escape the casual viewer. Once again, we should emphasize that architectural sculpture ought to be seen within its intended framework, not in isolation within the rooms of a museum. So should architectural painting be seen within the total structure. The value of its

colors would then be much more apparent (col. pl. 6).

It is perhaps significant that most vertical members (*regulae*, *triglyphs*, *mutules*, even *pediments*) in a Doric structure are painted dark/blue, most horizontal ones red. Yet the alternation of red metopes and blue triglyphs acts as a continuous band around the building, like a belt threaded through many loops. This is the moment to recall the Sikyonian Treasury metopes, with a ship gliding behind a triglyph (cf. ill. 31), or the many instances of action across the intervening spacers, over several panels. Even when metopes are left plain, unpainted (as at Lefkadia), their uniform color is enough to establish their connection.<sup>63</sup> And on the Hephaisteion, where only the carved metopes may have had a red background, they not only unified the façade, but helped connect the sides to the internal arrangement, thus articulating exterior and interior space.





In addition, one ancient word for frieze, *tainia*, means fillet or band. The continuous Ionic frieze can thus be seen as a long blue ribbon tying together the temple. Note, in particular, how often, in fifth-century Athens, such a blue ribbon visually fastened, as it were, prostyle columns to cel-las: at the Ilissos Temple, the Nike Temple, and, of course, the Parthenon itself.<sup>64</sup> The Erech-theion, I believe, may be a special case that proves the point. In her study on the use of dark stone in architecture, Lucy Shoe stressed the value of blue Eleusinian limestone or Hymettian marble in clarifying levels, where several of them were involved. A typical instance is the top step of the Athenian Propylaia, leading through the five doorways from the western to the eastern porch. Not only is that top step the highest of the five that form that inner stairway; it is also level with the top of the dark orthostates that line the walls of the western porch, so that the eye can follow the line of blue all around that space and

comprehend the ascending rhythm of the structure.<sup>65</sup> In the Pinakothek, the northwest room of the same Propylaia, an interior blue string course was introduced without consideration for the articulation of the walls, to correspond with the window sills and establish, presumably, the area to be occupied by the easel paintings that gave the room its name.

The blue stone used for the two Erechtheion friezes may have imitated contemporary painted backgrounds, or even cult-statue bases with their appliqué technique. But I believe it had the primary architectural function not only of connecting prostyle columns and cella, but also of establishing specific levels in a building unusual for its irregular plan, both internal and external. Approximately a century later, red stone seems to have served that purpose in the temple at Messa, as purple did on the vine-leaf frieze of the non-canonical structure which is the Alexander Sarcophagus, or the dark stone for the central step of the Maussolleion podium. And, after almost two hundred years, so did the blue paint of the balustrade in the Stoa of Attalos, clearly marking a specific level in a long building standing on uneven ground atop an ascending sub-structure.

During the Hellenistic period, undoubtedly, naturalistic and illusionistic effects may have been sought, so that a blue background may have conveyed the impression of open spaces or sky. Yet I would surmise that some retrospective intents were also operative, with a phenomenon that finds correspondences in the sculpture and epigraphy of the times. What else paint may have accomplished can be only suspected. To be



sure, any action by tinted or even unpainted figures would have become more legible from a distance if seen against a unified, vivid backdrop, but other purposes may have been served as well. It would have been possible, for instance, to use different backgrounds either to connect or to separate similar subjects: the sequence of a single myth among many metopes of the Treasury at Foce del Sele (cf. ill. 32); the work of a single master or workshop against that of another, at the Siphnian Treasury; the Peloponnesian versus the non-Peloponnesian Labors of Herakles at Olympia; the gods from the humans, on the Parthenon frieze; <sup>66</sup> and perhaps the different episodes of the Telephos Frieze. All but this last example seem to me to respond to architectural and sculptural principles, rather than to pictorial ones. Thus the final effect of architectural sculpture within its proper frame (whether metopal, pedimental, or continuous) would not have been that of a grand mural, but

rather of a window open onto the world, through which scenes could be glimpsed whether in total or in part.

## Notes to Chapter 4

1. Rose 1983 (xxxxiii) believes that the building's colors were inspired from chromolithography, a technique developed by Owen Jones in the mid-19th c. specifically to print colored and gilded reproductions of ancient art, and strongly influenced by Pompeian painting. She points out, however, that the sculptors who were hired by Charles Borie to design the polychrome terracottas for the Philadelphia Museum of Art (John Gregory and Carl Paul Jennewein) were Fellows of the American Academy in Rome; they should have had firsthand acquaintance with classical monuments. For further reading on the Philadelphia building, she cites: Leon V. Solon, "A Revival of Polychrome Architecture and Sculpture," *The Architectural Record* 602 (August 1926) 97, and id., "Color Sculpture and Architecture," *The Mentor* (May 1928) 42. The architects of the Art Museum were Zantzinger, Trumbauer, and Borie; the building was erected 19161928, but the one completed pediment (the

north), which represents sacred and profane love in Western civilization, dates from 1932. The south pediment has yet to be filled; it would have depicted the pursuit of wisdom in Eastern civilization.

2. See, e.g., the statement by Stewart 1990, 4142. The most frequently quoted work remains Reuterswärd 1960. A doctoral dissertation C. Yfantides, *Die Polychromie der hellenistischen Plastik* (Mainz 1984) has proved impossible to locate in the U.S. A second one, Dimitriou 1947, although outdated in some respects and mostly based on previous publications and comparative material rather than on direct observation, still contains some useful sections on pigments and color terms in antiquity; for architectural comments, see pp. 187–220. A detailed bibliography from the inception of the issue to

1954 is in Reuterswärd 1960, 927. Some good effects can be gleaned from the plates of L. P. Fenger, *Dorische Polychromie. Untersuchungen über die Anwendung der Farbe auf dem dorischen Tempel* (Berlin 1886). Of related interest is Naso 1996, although his concern is with painted architecture in Etruscan tombs that may imitate free-standing, non-funerary structures in various materials.

3. Brinkmann 1994 is vol. 1 in the series *Studien zur antiken Malerei und Farbgebung*. For the study on the *realia* of the Alexander Sarcophagus, see von Graeve 1987. For techniques being used today on later monuments, see E. A. Ivison and E. Hendrix, "Reconstructing Polychromy on Middle Byzantine Architectural Sculpture," Abstract, *AJA* 101 (1997) 387.

4. Manzelli 1994, 28990, states, for instance, that Athena, the war goddess, seems to be the only entity who wears a red chiton, whether as pedimental sculpture or as statuary in the round. This distinction, if correctly assessed, would indeed be helpful in identifying "anonymous" korai from the Akropolis, yet Phrasikleia, whose name is attested by her inscribed epitaph, is said (Manzelli, cat. 136 on p. 228) to have red only on the border of her "chiton" and on her stephane. This is contradicted by Walter-Karydi 1986, 29, who describes the same statue as having a solid-red peplos with blue rosettes and white-blue-red patterns on the borders. Direct observation confirms this second analysis. See, however, *infra*, n. 10, for the peculiar behavior of encaustic painting, as discussed by Manzelli, which might explain her statement. On the other hand, Brinkmann 1994, Cat. no. 6 on p. 157, describes the Dionysos on the north Siphnian frieze as wearing a red chiton and a yellow-ocher panther skin with red jaws.

5. I am quoting the English translation of Billot's article, 1983. In the same volume, see also the contributions by Hellmann and Fraise, and by Hellmann alone. The exhibition of these French architectural drawings took place in Paris from May 12 to July 18, 1982; it then moved to Houston, Texas, where the catalogue received an English translation and an Introduction by Barbara Rose, as mentioned above. Most of my information is derived from her and Billot's texts, and from Auberson 1983. A comparable discussion of nineteenth-century positions, especially with regard to the Parthenon, is found in Van Zanten 1994. For a briefer but more wide-ranging review of previous scholarship, not so strictly focused on the French Academy, see Manzelli 1994, 1930.

6. This position was surprisingly held by Antoine Chrysostome Quatremère de Quincy, permanent Secretary of the Academie des Beaux Arts during 18161839, who had written an influential book on chryselephantine works, with a lengthy title: *Le Jupiter Olympien, ou l'art de la sculpture antique considéré sous un nouveau point de vue, ouvrage qui comprend un essai sur le goût de la sculpture polychrome, l'analyse explicative de la toreutique et l'histoire de la statuaire en or et ivoire chez le Grecs et les Romains. Avec la Restitution des principaux Monuments de cet art et la Démonstration pratique ou le Renouvellement de ses procédés mécaniques* (Paris 1814). He advocated polychromy in statuary and bronzes, yet disparagingly referred to architectural carvings (the Elgin marbles!) as "sculpture de batiment" (Billot 1983, 78 with n. 104, and cf. 79 n. 113). J. J. Winckelmann (17171768), a pioneer in the study of antiquity,

believed in "white" sculpture and architecture, and considered excavated evidence of color as a degenerate and provincial, therefore episodic, manifestation: see Manzelli 1994, 19.

7. On Haller von Hallerstein, see Billot 1983, 73, from which my quotation is taken. On Harris and Angell and their descriptions of the Selinous metopes, see her p. 83; their book on Sicilian temples was published in 1826.

8. For Hittorff's reconstruction (tetrastyle prostyle), see Billot 1983, 8689, with color reproduction, fig. 51 on p. 88; cf. Auberson 1983, fig. 2; Manzelli 1994, col. pls. I (façade) and II (cross section). Van Zanten 1994, 272, specifies some of Hittorff's sources: cornices from terracotta examples, murals from Etruscan tombs, paintings from the exposed ceiling beams of the Norman church at Monreale, rinceau from the Roman "Tomb of Jehoshaphat" at Jerusalem. Hittorff felt justified in his eclecticism through his conviction that Greek polychromy was as systematic as the orders themselves, so that each member would receive equal treatment, regardless of location and date, and would be perpetuated in architectural descendants as removed in time as the Norman construction. For him, the function of the vivid colors and architectural orders was to express the character of each specific deity to whom the temple was dedicated hence he symbolized the human/divinized nature of

Empedokles through his mixture of Doric and Ionic elements on the building.

The most extensive treatment of Sicilian temples, Mertens 1984, 162 and n. 496, devotes only one line to temple B and gives as primary reference R. Koldewey and O. Puchstein, *Die griechischen Tempel in Unteritalien und Sizilien* (Berlin 1899) 93ff.! The combination of Ionic and Doric elements seems accepted by F. Coarelli and M. Torelli, *Sicilia* (Laterza Guidebooks, vol. 13, 1984) 93. It is however doubted by Dinsmoor 1950, 78 and n. 1, 270 and n. 2, who believes the temple is distyle in antis, states that the columns and antae are clearly Doric, and suggests that the Ionic capital used by Hittorff in his restoration may belong to a votive column. The temple dates "surely after 409" and may have been dedicated to the Punic Asklepios (Eshmoun).

Hittorff traveled to Sicily in the early 1820s, and his first publication, in collaboration with L. Zanth, appeared in installments, between 1827 and 1829: *Architecture antique de la Sicile, ou recueil des plus interessans monumens (sic) d'architecture des villes et des lieux les plus remarquables de la Sicile ancienne*. Other influential writers on Greek architectural polychromy were the Germans G. Semper, who wrote *Vorläufige Bemerkungen über bemalte Architektur und Plastik bei den Alten* (Altona 1834); O. M. von Stackelberg (*Der Apollotempel zu Bassae in Arcadien*, Rome 1826, esp. 3334, 7982); and the Scandinavian P. O. Bröndstedt (*Reisen und Untersuchungen in Griechenland*, 18261830) cited by Billot 1983, 8081. The latter two, in particular, expanded on the symbolic values of colors, and introduced ethnographic and religious considerations.

9. On this point, see Billot 1983, 12122, esp. her quotation of the criticism of the submission (*Envoi*) on the Bassai Temple by Denis Lebouteux (18191879), as expressed in the Report of the Academy for Oct. 15, 1853, pp. 37374: "To distribute a few colors without any harmonious association, on many parts of the temple, to cover the wall surfaces with uniform shades more

or less bright or dull, to raise in the naos with its existing rich frieze a single statue of the deity, this is not to arrive at the goal which has been set, for to restore a Greek sanctuary, where sculpture and historical painting were inherent decorations and the most varied assortment of works of art an indispensable accessory, without embellishing it with the poetic host drawn from rich mythology and imagination of the Greeks, this is to do a disservice to the true interpretation of the religious architecture of the ancients!" For the actual submission, see pp. 22627, sections, pp. 22829, elevations of the Bassai Temple.

10. Blue versus green: Harrison 1988, 340 and n.
2. This is a most important observation. She mentions that bright, unadulterated blue can be found on a porous lion-bull group from the Agora which was not treated: Harrison 1965, 3336, no. 95. See also Broneer 1939, col. pl. Brinkmann 1994, 33, states that today's green is a recent chemical conversion of copper blue, and that all ancient colors appear considerably darker today.

Red as "imprint" of other colors: Manzelli 1994, 280. She points out that red eyes and hair are therefore misleading, but the observation applies only to paint on marble, not on poros. The encaustic technique, by which colors mixed with warm wax were applied to marble (or wood) surfaces, was a special painting process (as contrasted, e.g., with tempera, fresco, and other methods) and is discussed by all authors who have written on ancient painting (e.g., *supra*, n. 2). Pliny *NH* 35.12225, describes the technique and states that Pausias of Sikyon, a 4th-c. master, was the first to use it to paint ceilings; however, the practice is certainly earlier. It is different from *ganosis*, which consisted of applying warm wax exclusively to protect a surface that was, presumably, already painted: see, e.g., Stewart 1990, 41-42, who quotes Vitr. 7.9.34.

11. See, e.g., Brommer 1967, entries for E7, E9, S32. In 1955, I was allowed to climb the scaffolding set up around the Parthenon for Brommer's cast-making, and could observe such details in person. On the "ghosts" see also Dinsmoor 1950, 179n. 1.

12. The statement on the restricted range of buildings employing leaf moldings is made by Altekamp 1991, section 6.11, who however (p. 369) stresses that a symbolic meaning cannot be proven. On the use of polychromy, see his section 6.7, p. 368, where he states that contrasting colors were used traditionally to enhance the carving, but could occasionally "negate" the underlying (non-carved) form; I assume he means that in such cases the patterns did not correspond to the molding profiles, like the bead-and-reel painted on the uncarved astragal of the Parthenon metopes mentioned in the previous note. On building accounts and models, specifying the making of (wax, stone, wood) patterns for capitals, triglyphs, simas, rosettes, akanthos, and probably also leaf ornaments, see Altekamp 205 n. 905, with references. He includes one to Hektoridas, who was paid to provide a model for the *painting* of the lion-head sima on the Epidaurian Asklepieion. For bronze moldings, as early as

the Archaic period, see Kyrieleis 1988 and (less well documented) Drerup 1952; Altekamp 1991, 371, Section 6.15, is more skeptical. For gilding, see, e.g., Carter 1983, 667.

13. Auberson 1983, 427. Some additions to his list could be made, for instance, the annulets of the Doric column. Cf. Walter-Karydi 1986, 33, and

Dinsmoor 1950, 17879. See also below for the Corinthian capital, which Auberson does not consider.

14. See, e.g., the watercolor (by R. Carta) of the polychrome sima from the so-called Temple of Victory at Sicilian Himera: *Himera. Zona archeologica e Antiquarium* (Palermo 1986) Pl. IV. The lion's ears and inner mouth are red and its mane is blue, while the face proper is yellow; cf. also Walter-Karydi 1986, 33, who similarly describes the lion spout from the Peisistratid (Old Athena) Temple on the Akropolis. For a color reconstruction of the Peisistratid sima, see Manzelli 1994, pl. XV.2 (after Wiegand 1904). See also Mertens-Horn 1986, fig. 5 on p. 27 which gives the color scheme for an Archaic lion's face, and Mertens 1993, pl. 45, for a colored rendering of the entablature of the so-called Basilica at Paestum.

15. Billot 1983, 11920; the Temple of Apollo at Corinth was also known, but no date was assigned to it. For Auberson's (1983) position on stucco, see 42728. At Olympia, extensive traces of stucco remain on the column drums of the Temple of Zeus, for instance. At the Delphic Apollonion, the flutes of some 4th-c. peristyle columns (East side) facing toward the interior were entirely built in stucco rather than being carved, and two layers can be detected: the finer one is attributed to Greek times because it lies under a coarser coating considered a Roman repair. Most of these comments are based on personal observations at the sites.

16. For decoration on the Archaic temples, e.g., at Isthmia, and especially in Magna Graecia, see supra, ch. 2 n. 42. At Elis, Pliny (*loc. cit.*) reports that the stucco was mixed with milk and saffron, which could still be smelled and tasted if rubbed with a wet thumb. I owe all information on the Elis Athenaion to G. R. Edwards, who moreover, with his usual scholarly generosity, has put at my disposal his bibliographical notes on Greek painted walls. Among these are references to Plutarch *Arist.* 20.3 and Paus. 9.4.1, who mention (panel?) paintings on the walls of the pronaoi of the Temple of Athena Areia at Plataia (with statue by Pheidias). These were by Polygnotos ("Odysseus killing the Suitors") and by Onasias ("Adrastos and the First Argive Expedition against Thebes"), and are discussed at some length by Castriota 1992, 6376. Paintings were also housed in the east cella of the Erechtheion (Travlos, p. 213), which had windows, probably for better viewing. The interior walls of the

Hephaisteion cella (Dinsmoor 1941, 94104, 15556) had lead channels to seal the vertical joins, and a stippled surface that has been considered preparation for (unexecuted) stuccoing and painting. For a recent discussion, see Delivorrias 1997, 84 and n. 15, who believes, moreover, that the building had no interior colonnade and that therefore the wall paintings would have been easily visible. Yet the horizontal joins of the masonry have no protection against humidity, and the stippling leaves a smooth band at the edges of the block, so that the stucco, if applied, would not have covered the entire exposed surface. That the stippling may have been meant solely to provide some textural contrast, as I believe, is supported by Bruno 1969, 316 and n. 48; cf. Townsend 1995, ill. 11 on p. 115, pl. 22, for a *stucco* string course with stippling from the Athenian Agora.

The interior walls of the Hieron at Samothrake were painted in the so-called "masonry style": for discussion, see Bruno 1969. Painted Macedonian tombs will be mentioned infra.

17. The references to current work and opinions (including Penrose's observation) are given by Altekamp 1991, 23738, n. 876: M. Korres and Ch. Bouras believe in the presence of color, but K. Kouzelis and colleagues are skeptical. See Altekamp 1991, 23641, for a full discussion of polychromy.

18. On the various problems and theories about the reconstruction of the so-called Hekatompedon gables, see Ridgway 1993, 28590, with extensive bibliography in notes, and different reconstructions given in ills. 2728. For color reproductions of the Bluebeard and Herakles/Triton, see, e.g., Lullies and Hirmer 1960, pl. 26; for the head of Herakles, see Broneer 1939, col. pl. facing p. 91, with colors described on p. 93; I accept that the head belongs with this figure, although it has been detached from the body by the current Museum display. Manzelli 1994, pls. XVIXVII are taken from Wiegand 1904, which represents the best source of information on the ancient coloring. For a black-and-white photo, see *LIMC* 8, s.v. Triton, no. 17 pl. 44.

19. Change around 530: Walter-Karydi 1986, 30; because of shift in vase painting: p. 29 (with comparison to gravestones and contemporary sculpture in the round; this theory was already advanced by H. A. Thompson in a lecture delivered on Dec. 28, 1972, when he was awarded the AIA Gold Medal for Archaeological achievement; for a statement in print, see Thompson 1984, 14); because of shift in material: p. 39 n. 32 (with references, esp. Furtwängler); because of imitation of sky (rejected): p. 31 and n. 39 (with references).
20. For the second (west?) Hekatompedon pediment, see the references given supra, n. 18. The uncertainty in assigning sculptures to the two gables derives from the fact that they were all found out of context, as fill. See, e.g., Rhodes 1995, 51 fig. 30 (which reverses the traditional assignment), and 191, ns. 78.

Introduction Pediment: Ridgway 1993, 288 and fig. 117; Manzelli 1994, col. pl. XVIII (after Wiegand 1904); reference to blue background: Walter-Karydi 1986, 39 n. 32.

21. Hydra Pediment: Ridgway 1993, 28788 (ca. 560?), with references, fig. 16; Walter-Karydi 1986, 30 (dated beg. 6th c.), lists the following colors: light background, blue horses, red chariot, human figures predominantly in red and blue, with touches of green. Manzelli 1994, col. pl. XVIII (after Wiegand 1904).

Red Triton Pediment: Ridgway 1993, 291 and n. 33 with references; *LIMC* 8, s.v. Triton, no. 16 pl. 43. W. B. Dinsmoor, in 1955, used to lecture to his students on the Akropolis that the pediment might have fallen into a puddle of *miltos*, a red substance used by masons to test the smoothness of their block surfaces.

Painted Pediment: Wiegand 1904, 23031 no. 12, pl. 6.13. It is probably no longer Archaic, but it has received little attention in recent years; yet it seems important in light of the so-called Oath of Plataia and the alleged lack of construction on the Akropolis until ca. 450.

Olive Tree Pediment: Ridgway 1993, 29091  
and n. 32 on pp. 31819, fig.

119. Winter 1993, 4, 309, points out that in Archaic Mainland Greece (as contrasted with practices in Magna Graecia and Asia Minor), only structures with sacred associations received tiled roofs; the building within the gable therefore cannot be a fountain house, as often advocated (cf. her p. 207, "so-called"); she also states that it had two hip roofs and corner akroteria: pp. 204205. See, however, supra, ch. 2n. 66 (Lang 1996).

That recession into space could be indicated in Greek art by elements painted on the background, thus contrasting with relief figures, is discussed, with other examples, in Ridgway 1983; the practice already existed in New Kingdom Egypt, as illustrated in that article. A similar engraved tree appears on the Corfu pediment (cf. ill. 38): Ridgway 1993, 27681, esp. 280 and n. 16, ill. 25.

Walter-Karydi 1986, 31, also mentions (without giving a specific reference) a late Archaic Athenian pediment with animals in light tones against a blue background, as proof that contrast was the intent behind the choice of colors, rather than consistency in rendering the beasts, which were previously painted red. This point is surely well taken, although I would not see this specific pediment as further evidence for the chronological change in background color from light to dark (blue).

22. Megarian Treasury: Ridgway 1993, 299; the coloring is mentioned by Walter-Karydi 1986, 30, and Furtwängler 1906, 305. Siphnian Treasury: Ridgway 1993, 29799; Daux and Hansen 1987, 205 fig. 122.

23. Furtwängler 1906, 305; see his pp. 304308 for discussion of polychromy on other ancient buildings.

24. Aigina, Temple of Aphaia: Furtwängler 1906, 300304 (pediments), and 4650 (architectural polychromy); Walter-Karydi 1986, 30 and n. 34. She dates the west pediment shortly after 500, but considers the east one no longer Archaic; she therefore does not describe its colors, although she suggests that its later date is confirmed by its palette that ushers in a new era. The excavations conducted by D. Ohly in the late 1960s and early 1970s confirmed that the east tympanum was also cobalt-blue. For the colors of the triglyphs and the removal of the original metopes, see Bankel 1993, 1619, who can confirm the later date of the east pediment through its differing technique for securing the sculptures to the horizontal cornice. See also Manzelli 1994, col. pl. XIX, Aigina west pediment, after Furtwängler 1906; Stewart 1990, 138, for the "earth-red" floor and the "sky-blue" background. Bankel 1993, 11113, in discussing the general polychromy of the temple, points out that, on

façade, the triglyphs (with other vertical accents, like regulae and mutules) were black, but those over the pronaos were in "Egyptian blue," like the tympanum wall. The horizontal elements (e.g., the architrave fascia and the tainia on either side of the geison) were painted in ocher red. Malachite green was used for details of the anta capital: cf. frontispiece, color plate. The entire temple was stuccoed to resemble marble.

25. Syracuse plaque: Ridgway 1993, 311 n. 7.12; Langlotz and Hirmer 1965, col. pl. 1. Architectural members in terracotta, to be sure, always preserve color much better than elements in stone. They were used throughout, from the

highly elaborate Sicilian revetments of the Archaic period to the Hellenistic simas of the Greek mainland (col. pl. 7).

26. The point on the Thermon metopes is well argued by Walter-Karydi 1986, 23 and n. 2; see her pp. 2930 for discussion of votive and funerary reliefs, with references. Foce del Sele metopes: Zancani Montuoro and Zanotti Bianco 1951, 13637; the best preserved traces were on metope no. 5. The light blue paint of the background was applied over white stucco, perhaps to hide irregularities in the finish, whereas whatever color remained on the reliefs was in direct contact with the stone, presumably not to obliterate fine details in the carving. Athenian Treasury metopes: La Coste-Messelière 1957, 2223. He comments that the background was prepared to receive paint by the use of an abrasive that created fine striations, and that some color, probably light blue, used to be visible in winter, under humid conditions, but is now completely gone. The bodies were left in the color of the marble, with painted details.

27. Brinkmann 1994: 3952, with folding pl. (Beil.) 912 for entire reconstruction of colors; the brown fascia/groundline extending into the background appears only on the east side, but the same space is restored, albeit left blank, on the other three sides. See also figs. 12544 for color details. On p. 49, it is stated that red, blue, and green predominate, while, statistically, yellow, orange, brown, and pink represent less than five percent of what is visible today, so that the coloring of the bodies is only hypothetical. It is also assumed that each figure was entirely covered by color, because of standard Archaic practices, although in no case can it be proved. Traces of white pigment are also attested. Athena's costume, on the north side, is especially rich, with engraved as well as painted patterns, and the inside of her aegis is covered with scales, which, on the west frieze, are colored in alternating blue, red, and green (cf. fig. 143). This interior scale pattern is also still visible in outline on the

aegis of the Athena from the Peisistratid (Old Athena) Temple pediment: Ridgway 1993, fig. 7.120(pl. 62).

The foreshortening of the wheels is especially important in view of the claim (Posch 1994, with fig. 1 on p. 26) that the foreshortened stool carried by a girl in the central scene of the Parthenon east frieze is a Pheidalian "invention" of a new type of representation. Wesenberg 1995, fig. 3 on p. 155, has a very different rendering of that same "stool," which he shows as a low tray; with her left hand, the girl would be holding a long-stemmed lamp rather than a stool leg. I doubt this second interpretation.

28. Brinkmann 1994, 48. He notes that the letters on the background of the north and east sides are from 3 to 3.5 cm. high, whereas those on the baseline are approximately 1 cm. smaller. This variation in size, combined with the contrasting colors, was probably meant to enhance legibility from a distance.

29. Ephesos evidence: Reuterswärd 1960, 3536; Walter-Karydi 1986, 30. The parapet could, of course, have been given a blue background to suggest figures standing against the sky, as appropriate to its high location.

30. For blue bulls and red lions, see the "Hekatompedon" pediments mentioned above. Horses (according to Brinkmann 1994): those of Automedon's chariot, on the East Siphnian frieze, have manes of the following colors: (1) strong middle blue, (2) brick red, (3) light green, (4) strong purple red-thus, two light tones framed by two intense tones. On the west frieze, Athena's left

pole-horse has green mane and tail, her left trace-horse has them in blue. On the south frieze, the left trace-horse of the quadriga is painted black, the other members of the team have no color preserved.

On the symbolism of colors: Walter-Karydi 1986, 31, 37; against her, Brinkmann 1994, 46 and esp. n. 89. Manzelli 1994, 3390, sees colors as semiotic codes with cultural function and meaning; cf. her concluding remarks, p. 285.

31. Anthemia, esp. of the Nike Temple-Erechtheion: supra, ch. 2 n. 48; Büsing 1990. Erechtheion North porch, capitals: supra, ch. 2 n. 38; Stern 1985 and 1988.

32. Treu 1895, esp. 2535; the metopes are described on p. 26; the statement on the tympanum color is on p. 32. See also Furtwängler 1906, 307, who disagrees with Treu on the presence of paint over the body of the Olympia pedimental horses, and believes that only tails were colored. Metope background in alternating red and blue: Reuterswärd 1960, 4142 (Olympia), 4850 (Parthenon); cf. Bruno 1981, 4 and n. 7.

33. For a convenient drawing of all the metopes, see Boardman 1985, fig. 22, with additional figures and commentary on the sculptures in general, pp. 3350.

34. Painted versus unpainted metopes on the Hephaisteion: Koch 1955, 9798; as examples of metopes with a red background, he mentions that with Theseus and Sinis, and that with Theseus and the Minotaur, both on the south side; he states also that the top fascia was painted blue. Pediments probably red: 99. Full discussion of color, with earlier reports and theories on polychromy: 82108. Hephaisteion frieze: Harrison 1988, from notes taken in 1953; she also details the metal attachments present on the frieze. See also *supra*, ch. 3 n. 27, for further bibliography. Correspondence of inner frieze and outer carved metopes: Ridgway 1981, 30, 7475.

35. Bruno 1981, esp. 45 and n. 7, on technical analyses conducted on the Parthenon metopes. Dinsmoor 1950, 178, but contrast Brommer 1967, 15961. Treu 1895, 27n. 22, refers to one source who had seen clear traces of red on the equine body of the centaur on S 12. Billot 1983, 67 n. 67, relates E. Michon's opinion that the blue trace detected on one metope was modern paint. B. Sauer (cited by Bruno) was convinced that he had found evidence for a red background. For the thorough painting of *all* surfaces of the building envisaged, albeit without proof, by G. Semper in 1834, see Van Zanten 1994, esp. figs. 78 on pp. 26465.

Great Lefkadia Tomb (also called "Tomb of Judgment"): see, e.g., Miller (Collett) 1993, 110, no.(18 Lefkadia) C, with extensive bibliography; Ridgway 1990, 18587, pl. 85. See also supra, ch. 3 n. 8. The most thorough discussion is Petsas 1966, with col. pl. 2 for details of the painted patterns on the sima, the dentil course, and the Doric corona. Bruno 198 , pl. 2.2, illustrates in color his own watercolor sketch of a Lefkadia metope.

The dating of the tomb is based primarily on stylistic evidence and could now be revised slightly upward, since architectural comparanda with the newly redated Vergina palace would allow a late-4th c. chronology. In a seminar session, Prof. Andrew Stewart commented that the image of the bearded deceased

painted on façade would suggest a man of the generation before Alexander, who introduced a beardless fashion for his followers.

36. For the definition of the Macedonian tomb, see Miller (Collett) 1993, 120, esp. 911 and ns. 4749 for discussion of architectural elements on façades. She mentions painted non-figural metopes as well as a painted pedimental scene on the Phoenix-Thessaloniki Tomb (her Cat. 30E), and another pedimental composition on the "Palmette Tomb" at Lefkadia (her Cat. 18F), but does not specify the color(s) of the backgrounds; she kindly tells me, however, that the Phoenix-Thessaloniki metopes have yellow phialai against a white background, in between blue triglyphs, and that the figures of the pediment stand out against a blue tympanum wall. See her entries for pertinent bibliography with illustrations.

Within the context of the Berkeley seminar, students expressed the opinion that the Lefkadia metopes were given a light background and muted colors on the figures in order to avoid contrast with the very colorful continuous frieze above and to convey through shadowing an impression of high relief where none existed. They therefore would doubt a conscious imitation of the Parthenon metopes *at that time*. I am still inclined to believe that useful information on the coloring of Classical metopes can be derived from the Lefkadia tomb.

37. Parthenon Pediments: Boardman 1985, 98103, with diagrams figs. 7778; Ridgway 1981, 4548. Zeus' thunderbolt: Simon 1980; sea monster: Yalouris 1984. For new finds see, most recently, Delivorrias 1994. Some gilding on west figures mentioned by B. D. Clarke, cited by Billot 1983, 69.

38. Color on frieze: various early travelers are cited by Brommer 1977, 209, and by Billot 1983, 6667 (including Millin) and 69 (Clarke). For the green rocks of the Parthenon, see Fehl 1961; discounted by Boardman 1985, 107; cf. his 106109 for comments on the entire frieze. See also *supra*, ch. 3 n. 19, for additional bibliography. Different background for the gods: Lethaby 1929, esp. 11, fig. 5. On colors as differentiating means: Ridgway 1981: 8283.
39. Erechtheion frieze: see, e.g., Boulter 1970; Boardman 1985, 14849; Stewart 1990, 168 and cf. 66. For a most recent addition, see Glowacki 1995. Vickers 1985 suggests that the blue stone of the Erechtheion frieze was chosen because of economic strictures, but see *infra*, ch. 5 and n. 6.

40. Cult-statue bases are discussed by Kosmopoulou 1996, 10649; see also Gadbery 1988, 15459 and figs. 7175 for a reconstruction of the Olympia base, and 12588 for the attribution of a molding in Eleusinian stone to the base of the Athena Parthenos. For the Hephaisteion base, see Dinsmoor 1941, 105109, fig. 38, although others would dissociate the slabs from the building (cf. reference to unpublished theory in Delivorrias 1997); yet the extant fragments would still attest the use of this contrasting technique. For the Epidaurus base, see Posch 1991. The major study on dark stone in Greek architecture remains Shoe 1949, although other examples have since been added; see also *infra*, n. 65 (Rhodes).

41. Blue coffers as allusion to sky: Tancke 1989, 17879 and n. 368; she cites the Hephaisteion, the Ares Temple, the Parthenon, the Propylaia, and the North Porch of the Erechtheion, and defines the blue coloring as *gattungsspezifische Polychromie*, a polychromy determined by its specific function. Korres 1994, 95 n. 28, mentions that the coffers of the North Porch of the Erechtheion copied those of the Parthenon pronaos.

42. Sidonian sarcophagi: in general, see Boardman 1995, 215, figs. 225 (Satrap's; dated about 400) and 226 (Lykian; dated about 380). Mention of their colors: Furtwängler 1906, 308, and Reuterswärd 1960, 6062. On the chronology of the various sarcophagi, see the bibliography in Ridgway 1990, 66 n. 27; also Ridgway 1997, 17374.

43. The major publication of the Mourning Women Sarcophagus is Fleischer 1983a, with color analysis on p. 60; he points out that the figures of the socle frieze have a yellow or reddish tint to their skin that differentiates them from the other human images. Colors are also mentioned by Reuterswärd 1960, 6062. The original monograph on the fourth casket, F. Winter, *Der Alexandersarkophag aus Sidon* (Strassburg 1912), details the color traces on all sarcophagi and is the basic source for all later descriptions. See also Ridgway 1997, 17476; Boardman 1995, fig. 227 (date: about 360).

44. Fellows is cited by Billot 1983, 97. On the Nereid Monument, see Ridgway 1997, 7988; Boardman 1995, 19091, figs. 218.116; the coffers are discussed by Tancke 1989, 1214, section 2.1.1, Cat. no. 1 on p. 228, pl. 9.1 (head). Halikarnassos Mausolleion: Boardman 1995, 2729, figs. 1722; Ridgway 1997, 11235, with extensive bibliography; on coffers, see Tancke 1989, 1822, Section 2.2.1, Cat. nos. 3.110 on pp. 22932, pls. 1009. On the colors of the Amazonomachy frieze, see Reuterswärd 1960, 83; Stewart 1990, 41; a detailed publication with attention to color, by B. Cook, is in preparation. Hoepfner 1996b, eliminating a stepped podium, would place the dark limestone blocks as a crowning course for the orthostates. He also mentions a blue background for the Chariot frieze.

Another non-Greek monument, the mid 4th-c. Heroon of Perikle at Lykian Limyra, had a frieze that included a cavalcade on both long walls; a cast of one relief slab has been tinted: see Borchhardt 1990, 169 no. 57. It shows a very dark background, against which the figures, with slightly tinted flesh, appear quite lively in their richly ornamented costumes in shades of brown, yellow, red, and orange; the foremost horse is white, the others brown or darker. Whether this color scheme is based on actual evidence is not stated, even in the official publication (Borchhardt 1976); it cannot, however, be taken as normative for Greek monuments.

45. Tegea metopes: Stewart 1990, 183; Boardman 1995, 25; Ridgway 1997, 49, cf. supra, ch. 3 n. 38. The supposition of a pictorial composition is probably influenced by the similarity of the subject(s) to those of the Telephos Frieze at Pergamon.

46. Epidaurus Asklepieion: Yalouris 1992, 13; for the central akroteria, see esp. his pls. 1 (Apollo, east side) and 2426 (Nike, west side). Prof. Andrew Stewart alerts me to the fact that the horizontal cornice on which the pedimental figures rested was canted on its top surface and uneven, perhaps in imitation of rough ground. Red ochre paint, as at Aigina, would have made the effect more realistic and certainly more visible to viewers.

Epidaurus Tholos, metopes: e.g., Junker 1993, 157; Ridgway 1997, 4748. Illustrations: Berve and Gruben 1962, pl. 97 (a: metopes; b: coffers). Although interpretation of the motif as phialai rather than rosettes is still debated, see Pfrommer 1982, 140 and n. 78, 170, for comparison with actual

metalwork. Note also the painted phialai of the Macedonian tomb mentioned supra, n. 36.

47. Priene coffers: Carter 1983, 6667, 7475 (colors); 83 Table G; his Diagram H on p. 89 gives a hypothetical arrangement of the entire peristyle ceiling. Traces of red on the drapery of one figure: Carter 1983, 169, no. 49. See also Tancke 1989, 3041, section 2.3.2, Cat. nos. 6.155 on pp. 24361, pls. 2530, who however retains the earlier 2nd-c. date (second quarter). In general, Boardman 1995, 30; Ridgway 1997, 13540.

48. Lysikrates Monument: Travlos, 34851, s.v.; Ridgway 1990, 1518, ills. 13 and detailed bibliography in n. 4 on p. 61. The foundations were in reddish conglomerate, thus adding a fourth color, but they were probably not visible. The most recent study of the frieze is Ehrhardt 1993; a thorough study of the structure, including the reconstruction with bronze satyrs helping to support the victory tripod: Bauer 1977. That bronze sculpture could be placed on buildings is known through Vitr. *de arch.* 1.6.4: a bronze Triton atop the Tower of the Winds in Athens held a rod with which he pointed to the reliefs depicting the various winds, according to the conditions of the moment.

49. The latest discussion of this building, with the date I have given above, is Rumscheid 1994, vol. 1, 5970, vol. , 43 n. 148. See also Frazer 1990, 16364 and n. 55; Ridgway 1997, 14243, with additional bibliography. Rumscheid vol. 1, 3435, discusses polychromy on buildings, and adds a third (Hellenistic) example to the Erechtheion and the Messa temple: the Temple of Demeter at Pergamon, where a white marble frieze had a red surround.

50. The comments that follow, on the polychromy of the Alexander sarcophagus, have been taken from: Furtwängler 1906, 308; Reuterswärd 1960, 62; Schefold 1968, 2324; von Graeve 1970 and 1987.

Another non-canonical example is known only through a literary source (*Athen.* 5.205a): the Nile yacht of Ptolemy IV Philopator (222/1-204), the "Thalamegos," had a Corinthian "oikos" carrying a frieze of ivory figures against a gold background; cf. Stewart 1990, 217 for a translation of the pertinent passage.

51. The official publication is Praschniker et al., 1979, where the section on architectural polychromy (pp. 6165) is by M. Theuer; the discussion of the coffers is by Praschniker: 7388, esp. 8788. See figs. 28a29a (p. 40) for the rendering of the patterns on the various recesses of the coffers; fig. 4949a (p. 68) for the color scheme of the anthemion frieze and the Corinthian capital; the abacus molding had blue leaves rimmed with white against a red ground, and the darts were white with a red outline to separate them from the adjacent leaves. On the coffers, see also Tancke 1989, section 2.3.1 on pp. 2530, Cat. nos. 5.121 on pp. 23442, pls. 2224. For other bibliographical references, including the latest reconstruction, see *supra*, ch. 2 n. 60, and ch. 3 n. 6.

An approximately contemporary building at Limyra, the Ptolemaion (cf. figs. 2930), has not yet been fully published, but seems to have had obvious traces of color when found, with red predominant in the Doric entablature and blue mutules: see Borchhardt 1990, 8083.

52. The larger volutes at the corners and the accompanying palmettes had no color preserved.

53. Pliny *NH* 34.13, mentions that Cnaeus Octavius, after his naval victory and triumph over Perseus in 167 B.C.E., dedicated a *porticus* that was called Corinthian because of the bronze capitals of its columns. See Schark 1996 for additional comments. Increasing naturalism during Roman Imperial times is also attested by the wind-blown rendering of the akanthos leaves on the Corinthian capitals of the Severan arch at Kyrene: Strong 1973.
54. Taras appliqués: Carter 1975, 14, and nos. 306, 34650, 361, 366, etc.

55. Winnefeld 1910, 21314, points out the similarity of this frieze to painting, and stresses, for example, its very few instances of metal attachments, as contrasted with the many of the Gigantomachy frieze. Some features that appear omitted might have been completed in paint, but he raises the question of whether the frieze, given its unfinished state, was ever provided with its final coloring. No traces remained at the moment of discovery, or at least none were noted.

56. Smith 1991, 161, suggests that "the dramatic effect would have been greatly assisted by dark background paint," but this statement is not based on actual traces, as stressed by Winnefeld 1910, 12021, who can only mention the evidence of the Maussolleion Amazonomachy, and draws additional inferences from the Alexander Sarco-phagus. On p. 29 n. 1 he relates that at the moment of discovery only traces of color in some eyes could be detected.

57. Pergamon Gigantomachy: an excellent condensed account is given by Smith 1991, 15864. For a good illustration of the Zeus panel, see, e.g., Lullies and Hirmer 1962, pl. 252. For the use of labels in Late Hellenistic works (e.g., the Zoilos frieze, the Apotheosis of Homer, perhaps the lagina frieze), see Osada 1993, 84.

58. Thompson and Wycherley 1972, 103107, esp. 104 and n. 114 (materials), 105 and n. 117 (parapet). The blue patterns, according to this source, include touches of red, but they are not obvious in the overall effect to a viewer looking from ground level. H. A. Thompson and G. R. Edwards tell me that there is evidence, as yet unpublished, that hangings would have added even more color and contrast of materials to the second story of the Stoa of Attalos; similar evidence exists for the Pergamene stoa within the Athena Nikephoros precinct: *AvP* 2 (1885) 40; Hansen 1947, 251. I thank Prof. Edwards for these references. Presumably such hangings served as awnings against the sunlight.

59. In early discussion of this issue, albeit in the context of all Greek sculpture, the desire for naturalism was considered paramount and equated with the practice of putting real clothing on sacred images, although it eventually led to pure decoration: cf. Manzelli 1994, 2728, who cites R. von Schneider, 1887. Van Zanten 1994, 26365, stresses rather the early scholars' emphasis on the vivid colors of the Greek landscape and the strong sunlight.

60. Manzelli 1994, 27476, with extended discussion on pp. 8190.

61. For Egyptian paintings and reliefs, see, e.g., Mekhitarian 1954, 2235, esp. 32. Some scenes do, however, have a light blue background: Lange and Hirmer 1957, 101 (Assuan, Tomb of Prince Sirenpowet, 12th Dynasty) and 75 (Saqqara, tomb of Mereruka, 6th Dynasty; personal observation). On the Assyrian orthostates, see Reade 1979, esp. 18; he states that black, white, red, and

blue details were noted, that Layard (but not Botta) mentions also green and yellow, and Place mentions violet. Assyrian tiles and walls, by contrast, were highly colorful, and the walls above the orthostates were surely painted. I owe this reference to R. S. Ellis. For a colored reproduction of a relief of the god Ahura Mazda from Persepolis now at the Fogg Museum, apparently on a plain background, see Lerner 1973, esp. pp. 12021 : green and yellows predominate, and there are touches of red-brown and blue; black is used for the hair.

62. For discussion of this tectonic principle in sculpture in the round, see Ridgway 1993, 88. Although other areas of Greece may have been less sensitive than Attika to the structural components of a human body, all Greek sculpture in general emphasized specific points and features.

63. As far as I know, friezes were never left with an unpainted background, unless the figured scenes occupied almost the entire space, as in the Pergamon Gigantomachy. The reason may lie in their lack of a unifying rhythm like that established by the triglyphs for the Doric frieze.

64. For a lengthier discussion of this concept, see Ridgway 1981, 7376, and *infra*, ch. 6. For terminology, see *supra*, ch. 2 n. 54.

65. Shoe 1949 believes that the earliest instances of the use of dark stone had a decorative effect; subsequently the purpose became that of clarifying levels; then to emphasize certain parts of a structure, as a safety device; finally returning to an ornamental function. She cites more examples than I have included, but see also *supra*, the Lysikrates Monument, and the Stoa of Attalos. Lauter 1986, 27374, who discusses polychromy on Hellenistic buildings without giving specific references, mentions also additional examples of mixed materials with color contrasts. See also *supra*, n. 49 (Rumscheid 1994, vol. 1). Rhodes 1995, 72 (and ns. 69 on pp. 19697), believes that the use of dark orthostates and step in the Athenian Propylaia "emphasized the separation of holy and profane, and literally underlined the spiritual transition that took place between the west and east porches."

66. Could the central metopes on the Parthenon south side have had their background painted, to distinguish them from the surrounding Kentauro-machy, since they seem to depict a different subject? By the same token, were metopes N 3032, which scholars have had difficulty reconciling with the Ilioupersis theme, similarly differentiated from the previous 29? We shall return to this point in the next chapter.

## Chapter 5 When: The Changing Meaning

One of the most famous metopes from the Temple of Zeus at Olympia is that of the Apples of the Hesperides, which we have already mentioned (chapter 3) (cf. fig. 7) as an excellent example of architectural sculpture harmonizing with its surrounding frame. We can now look at it from a different angle, as it were: as an illustration of supporting figures at the time of its creation, around 460 B.C.E.

The story is well known: Herakles has to obtain apples from the Tree of the Golden Fruit guarded by a fierce snake in the Garden of the Hesperides. He performs this labor by proxy, sending Atlas the Titan to fetch the fruit for him; yet he performs a feat nonetheless, since he has to shoulder Atlas' burden in order to release his helper for the mission. For Atlas, holding the heavens was a punishment for his revolt against the Olympians; for Herakles, however, it was a momentary effort that served to underline his exceptional strength, therefore a highly positive deed. Because of the (Telamon-like) pose required by the task, the hero cannot hold his usual attributes, club or bow; he is readily identifiable, however, through two visual clues: the cushion he uses on shoulders unaccustomed to the weight, and the help that his patroness Athena lends him with her raised hand. The first clue may be proleptic and even a phantom, in that the pillow may never have existed. One version of

the story, in fact, has Herakles convincing the reluctant Atlas to take up his position again, albeit (allegedly and deceptively) temporarily, so that the hero can provide

himself with something to cushion the load; thus for the stratagem to work, no such item should have been already in place.<sup>1</sup> The second clue is more significant, in that Athena would not have helped the Titan, but only her protégé; in so doing, she asserts her divine nature (she needs only one hand, versus the hero's two forearms and bent neck) and she also assumes the pose of a female support, as described by Athenaiosa Karyatid.<sup>2</sup> Within the same metope, therefore, we have both the female and the male version of these architectural features.

This point has been made before.<sup>3</sup> What has been insufficiently stressed, however, is the fact that the poses here have a *positive* connotation, being personified by Athena and Herakles respectively, as contrasted with the negative meaning punishment, servitude that commentators since Vitruvius' time have attempted to ascribe to such human supports.<sup>4</sup> The problem, to be sure, is twofold: we tend to accept whatever an ancient source states because of its early date compared to our times, regardless of the fact that it may have been written as many as five centuries after the first examples; and we are often inclined to consider Greek art as a monolithic construct, with little change or variation through time, despite our basic awareness that this was not so.

With a somewhat schizophrenic attitude, we wish to emphasize those qualities of idealization and humanism that we consider quintessential of classical monuments regardless of date and location, while simultaneously exploring possible

political undertones that would anchor those very monuments to specific events and times eternal, almost genetic imprints on the one hand, and temporal, contingent, and ad hoc expressions on the other. This modern attitude is responsible for many contradictory statements in the scholarship of the past century, and will probably continue to produce more, until a new critical trend supersedes the current anthropological and political approach. It is the premise of this chapter, however, that Greek architectural sculpture carried different meanings according to time and place, although its primary message, at all times, was religious, and any allegorical or historical allusion was entirely secondary and left up to the (ancient) viewer's perception. We can only explore a few instances of changing iconography, but I shall select those most popular in architectural sculpture and most indicative of such changes, according to both traditional scholarship and my personal interpretation. I shall begin with Karyatids and Atlantes/Telamones.



## Karyatids and Telamones

Vitruvius' account (*de arch.* 1.1.5-6) is explicit in stressing the humiliating punishment of the women of Karyai, a Peloponnesian town destroyed by Sparta because it had favored the Persians, and whose matrons, taken into slavery, were represented in place of columns, attired in all their status-laden robes to suggest their fallen fortunes. In the next paragraph, the Roman architect writes about the Persian stoa at Sparta, built after the Greek victory at Plataia and expressing the same concept, with Persian prisoners this time supporting the entablature. Such an elaborate portico had seemed too advanced for the period after 479, and no war between Sparta and Karyai was ever recorded; indeed, the Peloponnesos was not invaded by the Persians, so that no overt instances of medism could have taken place. The Vitruvian anecdote had therefore been taken lightly, especially since no traces of the alleged "Karyatids" had been found during the early excavations in the Lakonian capital.

In the last two decades, however, several scholars have written in defense of Vitruvian accuracy, attempting to justify what seemed an anachronistic account and thereby, in my opinion, forcing historical events to support iconographic expressions or, rather, manipulating archaeological evidence to fit recorded history. Specifically, Plommer (1979) accepted the connotation of punishment expressed by Karyatids, but attributed the destruction of Karyai to the years after the battle of Leuktra (371 B.C.E.), on the grounds that Karyai had encouraged the Thebans to attack Sparta. Vickers (1985) was even more emphatic in underscoring the meaning of servitude implied in the Karyatids' support of an entablature (or whatever other objects female images may have held, whether water basin, mirror, or armrest of a throne), but he saw it as a specific allusion to Persian iconography, almost a parody of the Great King's expressions of supreme power. He therefore accepted the charge of

medism against Lakonian Karyai (on the grounds that by not actively participating in the fight against the Persian invader, all the Peloponnesian cities but Sparta had effectively medized), and lowered the chronology of extant examples of female supports. Thus the "Siphnian Treasury" (cf. ill. 16) (whose identification, Vickers claims, is not based on actual evidence) would date after 480/79, and the Erechtheion "Korai" (cf. fig. 6) would carry a political message to the Spartans at the time of the Peloponnesian War, warning them *not* to

medize in their quarrel against Athens.<sup>5</sup> The number of figures of the South Porch would allude to the six Spartan invasions of Attic territory, the location of the structure (over the ruins of a temple destroyed by the Persians) would remind the viewers of the consequences of foreign invasion, and the apparent shortcuts in building the Erechtheion (including the use of blue stone [cf. fig. 10 for the background of the friezes in place of the more expensive, imported blue pigment for paint]) would bespeak the financial strictures of an Athens weakened by a disastrous Sicilian expedition. The inception of the Erechtheion project was therefore dated by Vickers after 413 B.C.E.<sup>6</sup>

One of Vickers' comments is particularly significant in our context: he pointed out that the Erechtheion Karyatids have been given a benign rather than a hostile connotation because of the romantic tendencies of early nineteenth-century scholars, when the statues "became in effect the patron saints of philhellenism." Yet, to my mind, the figures themselves express no message, whether negative or positive, and appear relaxed in supporting their relatively light weight.<sup>7</sup> We "read" them according to our understanding of the ancient sources. Hersey, for instance, identified them as the six daughters of Erechtheus, sacrificed to obtain victory over Eumolpos and his Thracians, and therefore saw them as an *exemplum* of "noble" sacrifice, as contrasted with the "punitive" sacrifice of the women of Karyai. Bammer, however, took Karyatids to express the position of women in Greek society, not only subordinate but also draped, whereas Telamones could be represented naked; accepting Vitruvius'

metaphor of the orders, he stressed the feminine quality of both Ionic and Corinthian, used primarily for interiors, against the exterior use of masculine Doric, once again thus reflecting the respective position of the genders within society. It is ironic, in this case, that Karyatids should have been credited to Sparta, where women were allowed much greater freedom than in Athens, and indeed could compete semi-naked in athletic events.<sup>8</sup>

The long robes of the women of Karyai mentioned by Vitruvius have given rise to more critical comments which, I believe, are closer to the mark. The Roman architect expressly states that the prisoners were not allowed to divest themselves of their matronly costumes, so that their punishment would be more obvious. Both Wesenberg and Schneider have now interpreted this passage in terms of the Roman audience for which it was intended, albeit with slightly different emphasis. For Wesenberg, the explanation of the dignified attire of the Greek Karyatids is

needed because it contrasts with Roman iconography of slavery; specifically, Vitruvius' *aition* would have made intelligible to visitors that the Karyatids of the Forum Augusti, copying those of the Erechtheion, were indeed an allusion to the fact that the entire complex had been built *de manubiis*, with the booty resulting from Augustus' domination of the entire classical world. Schneider would agree that contrast existed, but he sees it rather between the outer appearance of freedom and the harshness of the task. He therefore assumes that Vitruvius introduces the historical reference to justify to the Romans the specific type of female prop with long robes and lowered arms, since other types of human supports were current in his time, namely those with arm raised.<sup>9</sup>

Were such female columns also called Karyatids? The issue of nomenclature is important indeed, and has received different answers.

Plommer, for instance, assumed that we should "forget about the Erechtheum korai" when studying Karyatids of the Vitruvian type, since they were never called by that name in the building accounts. He also introduced an additional distinction from the Nymphs in the entourage of Artemis Karyatis (Paus. 3.10.7), in whose honor Spartan virgins danced—thus probably inspiring the *saltantes lacaenae* made by Kallimachos (Pliny *NH* 34.92), and perhaps even the Maenads/Thyiades allegedly by Praxiteles in the collection of Asinius Pollio in Rome (*NH* 36.23). Each of these works carries problems of its own, but certainly the Karyatids of the Akanthos Column in Delphi are in a dancing pose, wear a short costume and raise one hand, thus in this last respect conforming to Athenaios' definition. Discoveries of similarly posed figures in tombs

and heroa have actually led to the belief that *all* Karyatids carried a chthonic or funerary connotation, once again with an overarching interpretation that has created its own reaction. A third type, perhaps inspired by male Atlantes, in that it has both arms raised, but taking the form of the Vegetation Goddess (the so-called *Rankengöttin*) is also attested archaeologically, in peripheral areas.<sup>10</sup>

Archaeology and literary sources provide examples of female supports earlier than those allegedly built by Sparta after the Persian wars. A Lakonian example of the mid-Archaic period, the Amyklai Throne built by Bathykles of Magnesia, had figures identified as Charites and Horai (Paus. 3.18.9-10). No ancient name is available for the mirrorimage couple marking the façade of the Siphnian Treasury, but it has been noted that they-and other such pairs at Delphi-given their kore-like

pose and heroic size, were indeed inserted into, but not fully integrated with, or even subordinated to, their architectural frame; their poloi may rather imply divine or superhuman status. One late sixth-century set at smaller scale has been tentatively associated with the Temple of Apollo itself, and may have represented Thyiades, in connection with Dionysos' supposed grave. On the Athenian Akropolis, the so-called Lyons Kore might have had an architectural function, and other figures may be thus interpreted. Female statues in stately robes (perhaps even with divine headdress and status) holding up entablatures existed therefore almost a century before the Persian wars.<sup>11</sup> Yet modern commentators are reluctant to relinquish the advantage provided by an ancient source and a historical connection.

Thus Schneider is confident that Vitruvius would not have used an erroneous anecdote in his very first example demonstrating the importance of historical knowledge in the trained architect. He, and Plommer before him, sought additional support for the Latin passage in its further mention of another Spartan building with figures, the *Porticus Persica*, which was also described by Pausanias (3.11.3), although the Periegete was writing approximately 150 years later, by which time that agora building seems to have received greater embellishment. Both scholars used as evidence a terracotta statuette of a barbarian in the typical male-support position, which was found within a Hellenistic structure in Sparta and could reflect the Persian Stoa. Schneider, moreover, did not think such a portico too elaborate for the early fifth century, and cited as a possible parallel the approximately contemporary Akragan Olympieion (cf. ill. 8), with Atlantes helping to hold up the entablature in clear

allusion to the defeated Carthaginians.<sup>12</sup> The problems involved with this entire topic of human supports are such that, at this point, I can only express my opinion of the issue, from my personal, limited perspective.

I do not consider the defeated and naked Giants of the Magna Graecian temple to be a valid parallel for the Spartan Persians; they are more in keeping with the allegorical approach that Greeks from all regions seem to have used on their sacred buildings-choosing mythological figures to allude to historical events-in order to avoid accusations of boastful *hubris*. The draped Persians suggested by the Lakonian terracotta would be a fully historical depiction instead, even if it could be argued that they had little religious significance, being used for a secular stoa in a market place. Pausanias' mention of a specific individual (Mardonios) among the figures "in white marble" could be explained

as a later anecdote grown around what may have appeared as a more personalized image; but the alleged presence of a woman (whether or not she portrayed the Karian queen Artemisia) within the monument, implying perhaps an alternation of male and female supports, would be more difficult to explain in Sparta shortly after 479. I could however accept such an arrangement at a later (Hellenistic) date, as attested, for instance, in Magna Graecian structures, especially if the Persians were "above the columns," rather than taking their place. 13

Pausanias does not explicitly date the Stoa Persike, although he makes it clear that he believes it alludes to the Persian invasions of 480-479. Vitruvius, in Augustan times, could have heard about the Spartan stoa and have automatically extended its meaning and chronology to the Karyatids as women of a medizing Karyai, with that special interest in etymologies (albeit often erroneous) common to learned writers in classical antiquity. He may, indeed, have been influenced by the contemporary building of the Forum Augusti, and by his own knowledge of another type of Karyatid with raised hand. This type is usually considered no earlier than the second half of the fourth century, yet the Athena of the Olympia metope would attest to its existence as early as approximately 460 B.C.E. An even earlier instance could be the maenad/Nymph being chased by a satyr below the armrest of Zeus' throne on the east Siphnian frieze. Vickers has pointed out that the satyr appears unburdened,

while the female figure raises one hand to the horizontal bar overhead.<sup>14</sup>

If Vitruvius' *aition* has to be discounted as a later fabrication, what was the meaning of the Greek human support? Given my topic, I must here overlook the possible relationship of the architectural examples to those in the minor arts, which had a more limited and less official visibility, although some inspiration may easily have moved from one category to the other. An element of punishment, or at least of great effort, seems indeed intrinsic to the Atlantes. Female figures, however, seem to occur earlier than the male type, and, as I have tried to stress, in dignified, perhaps even divine poses. They could have represented Nymphs, Thyiades, or other such beings, and, to judge from the Athenian Akropolis and Delphi, some may have been associated with funerary structures-Kekrops' and Dionysos' tombs respectively. Thus, at the Panhellenic sanctuary they were probably used in treasuries not only as an element of luxury but also as an allusion to a local tradition, in honor of the main

deities of the place. Yet their very neutral appearance, comparable to that of the standard female statue used as an offering on

the Athenian Akropolis, would have conveyed a variety of meanings to the more or the less sophisticated observers.

The series is chronologically discontinuous, and it has been pointed out that it is also diverse geographically and non-uniform in style. Yet each female example embodies, to a greater or lesser extent, elements of retrospective style, as if to underscore the non-human, statue-like function of the support.<sup>15</sup> One more shift in meaning seems to occur at the end of the fourth century: the use of Karyatids on theaters during the Hellenistic period, not only in Magna Graecia but also in Asia Minor, may suggest that the Dionysiac element had by then taken precedence over the funerary connotation, which however persisted throughout the Italic and the Hellenized sphere. Other influences, for instance, from the ritual dancers in honor of Artemis, may have been felt, since some of these theatrical supports are in dancing poses, and some examples in different contexts take the form of the vegetation goddess, probably with fertility implications. But the connection with the stage led also to an asso-

ciation with satyrs, who appear as the equivalent of the Atlantes-both they and the Maenads with raised and bent arms, albeit without the initial implication of punishment. Comparable types have been found in private houses, when a tendency for personal luxury and interior decoration allowed it. By the end of the Hellenistic period that is, the end of the span being surveyed-Karyatids and Telamones could represent a form of ornamentation without great symbolic meaning, or, to put it differently, their ultimate message was conditioned by context rather than vice versa. As always in Greek art, to assign a single and immutable content to an iconographic form is not only impossible, but also methodologically faulty.

## Kentauromachies

The above statement applies, in a different fashion, to my next topic. The plural form of the noun is meant in fact to suggest that discrete myths can be told under the generic heading of "Battle against Centaurs." Each myth, in turn, seems to have a chronological as well as a geographic identity, and probably a different rationale behind its inclusion in temple iconography. Yet we tend to think of the Kentauro-machy as the typical subject for a frieze (whether Doric or Ionic) that can be extended to indefinite length, according to the requirements of each architectural frame, since no number of combatants is specified by the story. We thus see the topic as eminently suitable to be coupled with the

Amazonomachy, or, more rarely, with the Gigantomachy, especially because all three themes appear to carry similar overtones—the triumph of the civilized over the unruly or the barbaric—therefore lending themselves to allegorize almost any conflict ending in the victory of the party erecting the structure thus adorned.

How this semantic concept may lead to conflicting interpretations will be explored later. Here, it suffices to state that a rough statistical count reveals our subconscious assumption to be incorrect. Against six, at most eight, examples of the Kentauroomachy (or at least of a battling centaur) in association with an Amazonomachy (or at least a defeated Amazon), and two (one of them uncertain) with a Gigantomachy, I have counted well over twenty instances in which centaurs appear in some kind of battle context, but either as sole topic or in conjunction with diverse subjects. These numbers are approximate, because no complete listing of extant occurrences in architectural terracottas exists at present, and some stone examples are still debated or are preserved in isolation, with no information available on adjacent representations. Yet a few patterns emerge nonetheless. 16

Perhaps the most significant is the Archaic preference for the Kentauroomachy at Pholoe on Asia Minor territory, with additional examples in Magna Graecia. Although one of Herakles' adventures, this is quite different from the individual episodes in which the hero battles either Nessos or Eurytion, in a peculiar duplication of women's rape and revenge. At Pholoe, a mountain of Arkadia, Herakles stops on his way to capture the Erymanthian boar, and is the guest of the civilized centaur Pholos. According to some versions of the legend, Dionysos has left there a pithos of wine specifically for the hero, although his host is reluctant to open it, worrying that the fragrance may attract his wilder companions. Herakles insists and Pholos' fears are realized; the centaurs attack, Herakles kills many of them with his arrows, and eventually even Pholos dies, accidentally wounded by an arrow he has extracted from a corpse. In a more elaborate account of the same story, Herakles chases some of the cen-

taurs to Cape Maleas where the wise Cheiron resides, and ends up by unintentionally wounding the centaur doctor, who cannot heal and therefore has to exchange his immortality with Prometheus. In one version, Herakles has to be cleansed of these murders before being admitted to the Eleusinian mysteries.<sup>17</sup>

The best preserved version in stone appears on the architrave of the Assos Athenaion, in the Troad (cf. ill. 11). Pholos holds the fateful cup and raises his left hand, as if admonishing either the shooting Herakles



or the centaurs, who are already retreating, while another group of galloping creatures converges on the scene from the opposite direction. The motif is thus treated as a series of repetitive images that can occupy a long stretch of space. Approximately the same treatment recurs at Foce del Sele, where the story is broken into a series of metopes containing one participant each; thus each panel in isolation is meaningless, and the entire sequence is needed to perceive the narrative. That narrative exists is, however, shown by the various poses of the centaurs, those closer to the hero being already wounded by his arrows and collapsing, those farther from him still charging in a threatening attitude. This frieze-like arrangement is quite different from that of the encounter between Herakles and another centaur (probably Nessos) which takes place on only one metope and is therefore self-contained. It is this second pattern that will prevail on the Parthenon and in other depictions of the Kentauroomachy-a

difference in treatment that is in fact caused by the type of weapons being used (arrows are shot from a distance, not at close quarters) and should help in identifying one subject over another when the evidence is fragmentary.<sup>18</sup>

This is the case with the many architectural terracottas from Thasos, Mytilene, Larisa on Hermos, Neandria, and even non-Greek territories, such as Ak-alan in Phrygia and Amyzon in Karia. They are simas, revetment plaques, even antefixes, which by nature should not lend themselves to continuous narrative, and appear to work against the advantages of a medium that demands repetition and promotes economy through the use of a single mold. In fact, Herakles' adventure contrasts with other typical terracotta subjects from the same areas that involve 'monotonous' compositions, and, as Winter points out, it is never used for terracottas of the Greek mainland.<sup>19</sup>

Why should an Arkadian myth receive such attention in outlying territories away from Greece proper and unconnected with the hero? George Szeliga argues that this popularity is not a fad, and may be explained through the peoples who inhabited peripheral, well-forested regions and were concerned with hunting. Herakles to them might have appeared as a folk hero battling monsters and hunting wild creatures, and thus comparable to themselves in occupations and views, rather than as a true mythological, quasi-divine character with panhellenic connotations. Even the purification rites required by Herakles' killing of the centaurs may be related to primitive beliefs about the need for propitiation and expiation after the hunt. As population increased, a different form of Kentauroomachy took the place of the Pholos adven-

ture, which was in fact never used, even in the Archaic period, by the large, more urbanized centers. Yet that the myth was not an insignificant episode in Herakles' life is shown by its continued inclusion by the playwrights together with others of his deeds, and by the full narrations of the late Hellenistic and Roman periods. The single combat of Herakles and a centaur without surrounding elements of explanation, as, for instance, not only at Foce del Sele but also among the metopes of the Athenian Treasury at Delphi, may represent one excerpt from the larger story before a justification was found for it-a justification that took puzzling replicated form, as already pointed out. 20

The diffusion of the Pholoe story in outlying areas is factual evidence; its interpretation is inevitably speculative and open to debate. We may never know the motivation behind specific representations, as we cannot fully reconstruct the circumstances and the mentality that produced them. Yet scholars have consistently claimed specific meanings behind the *other* centaur fight, the so-called Thessalian Kentauroomachy, involving Lapiths and their women at the wedding feast of Peirithoos and Deidameia. Most traditionally, the subject is understood as an allegory of the Greek victory over the Persians, yet its meaning may be more nuanced. In a recent essay, Robin Osborne has emphasized the popularity of centaurs on fifth-century buildings as against their paucity during the Archaic and then during the later periods. He explains this outburst of interest in the Lapith encounter as deriving from the complexity of the centaurs themselves, neither monsters nor entirely good and re-

sponsible individuals, thus presenting almost a mirror for human beings "who found themselves having rationally to decide on matters in which they were passionately engaged." The intended audiences differed: at Olympia, they were the competing athletes; in Athens and its environs, they were the Athenian citizens; at Arkadian Bassai (cf. ill. 9), the mercenaries whose patron Apollo Epikourios was. But in each case contradictions and ambiguities would have been involved, especially at Bassai, where the juxtaposition of Amazonomachy and Kentauromachy suggested that the same men defending women from centaurs could then fight women as Amazons, as one of the problems of mercenary warriors, whose enemy/victims might change at random.<sup>21</sup>

Once again, these interpretations may be correct—or they may be one explanation among many. Certainly, Osborne fails to take into account the many occurrences of the centaur in Archaic public art which we have discussed above (he mentions only the Temple at Assos and the

Athenian Treasury). He is equally dismissive about the fourth century and the Hellenistic period (only the Halikarnassos Mausolleion is cited, whereas other instances exist, as we shall see). Finally, there is another aspect of some of these Lapith Kentauroomachies that he seems to disregard, and which may throw a different light on them: the episode of Kaineus.

The myth was known as early as the Homeric poems, and receives one of the earliest iconographic depictions, in which the basic elements of the story-Kaineus' invulnerability and his being pounded into the ground by centaurs-are already obvious. By contrast, his transformation from woman to man is never shown, perhaps because too difficult to represent, unless a fourth-century South Italian skyphos makes Kaineus look androgynous for narrative rather than for comic reasons. 22

Kaineus is a Lapith, and his very presence is enough to identify the Kentauroomachy in which he appears-so much so that Pausanias (5.10.8), erroneously, recognized him on the west pediment of the Temple of Zeus at Olympia as the figure we now know as Peirithoos (K). Yet Kaineus seems to be part of a later phase of the conflict, when the Lapiths, enraged by the behavior of the centaurs at the wedding feast, pursue them from Thessaly into the Peloponnesos. Therefore Kaineus is missing at Olympia, where the emphasis is on the violation of hospitality at the banquet and women are prominent, and he seems also absent on the Parthenon metopes, where female victims are again included. Thus I would disagree with Osborne's reading, who sees in the various Parthenonian depictions *not* "personal, domestic violence, but all-out war." Had the allusion been primarily to the Persian invasion and its repulsion by the Athenians, wouldn't the chase away from home territory have been a

better choice?<sup>23</sup> We must admit, moreover, that we are still uncertain about the meaning of the central sequence of metopes on the south side (panels 13-21), despite the recent addition of numerous fragments; perhaps a more definite understanding of the myth depicted on them would serve also to illuminate the specific Kentauro-machy involved.<sup>24</sup>

Kaineus explicitly appears, however, where there is armed conflict, as on the Hephaisteion. Yet he is invulnerable, and thus may seem a surprising figure on a temple to Hephaistos, who is the forger of weapons par excellence. Although his disappearance underground is already in progress, he is being helped by a man in traveling attire, as suitable for Theseus, thus explaining the interest for an Attic audience. Athenian had earlier shown just such a traveler, even in excerpted vase painters had earlier shown just such a traveler, even in excerpted

scenes of this Kentauroromachy. On the Temple of Poseidon at Sounion, Kaineus' (as well as Theseus') connection with the god of the sea may explain the selection. At Bassai, the Peloponnesian extension of the myth may justify its presence in a sequence of friezes that extol other local heroes. 25

In the fourth century, a Battle of Centaurs (in conjunction with an Amazonomachy) occurs on the outer metopes of the enigmatic tholos in the Sanctuary of Athena Pronaia at Delphi, but the remains are too fragmentary to reveal whether Kaineus was included. The function of this elaborate building is unknown, although some suggestions call it a heroön. If such, it would well agree with subsequent instances of the Kentauro-machy with Kaineus on non-Greek territory, where the eschatological meaning implicit in the hero's kathodos may have determined the choice of the topic for funerary monuments well before the Maussolleion. The earliest is at Lykian Trysa (ill. 37), on the perimeter wall of a heroön for a local (and as yet unnamed) personage. Others do not qualify as architectural sculpture but are significant for the semantic implications: a sarcophagus lid from Limyra, also in Lykia, and one short side of the so-called Lykian Sarcophagus from the Royal Nekropolis at Sidon, in north

Syria. Finally, in the late Hellenistic period, a frieze from Mylasa, in Karia, has no definite context, but its location associates it with the much earlier centaur frieze on the Halikarnassos Maussolleion, which involves women, but is too poorly preserved for us to know whether the Kaineus myth was included.<sup>26</sup>

Other Kentauromaches that appear on Hellenistic structures in Asia Minor may have indeed been influenced by the famous tomb of Maussollos, although they use the panel format rather than that of the continuous strip. The best preserved sequence comes from the coffers of the Mausoleum at Belevi (cf. ill. 13), where the Lapiths wear contemporary (early third-century) armor, and a few slabs show athletic scenes, probably funerary contests. Doric metopes with this subject decorated the north side of the podium of a heroön, the so-called Ptolemaion, at Limyra (figs. 29-30), but the topics of the remaining three sides are so far unknown. Even away from Anatolian territory, several friezes in soft limestone embellished funerary structures at Taras, perhaps in keeping with the interest in the Kaineus episode revealed by South Italian vases. Other occurrences are less easily classified as funerary/heroic. On the island of Thera, a single metope remains, out of context, but large enough

to have belonged to a public building. Another Kentauroromachy, more uncertain, has been postulated for the metopes of the Athenaion

at Ilion, where the choice may have been influenced by the Parthenon, as was probably also the case for the Halikarnassos Maussolleion.<sup>27</sup>

Finally, centaurs in Dionysiac context appear on the coffers of the pronaos added (probably in the second century) to the Hieron at Samothrake, and, as part of the festive cortege of the gods, on the frieze of the temple at Teos. To be sure, this entire sculptural composition may have been replaced at the time of the Roman Imperial repairs, but the subject was probably retained from the original. The conjunction of centaurs and Dionysos is moreover well attested on Roman sarcophagi.<sup>28</sup> Whether by the Hellenistic period the creature had acquired a meaning symbolic not only of death but also of blessed afterlife, we cannot tell, but something similar may have happened to the Amazons, to which we turn next.

## Amazonmachies

As mentioned above, several Kentauromaches occur in conjunction with Amazonomachies, and the latter, like the Kentauromaches, may represent different myths and battles. Similarly, their meaning varies with time and place. Amazons have been a popular subject in recent times, but almost always in the context of the Persian wars, from an Athenian point of view, and as the epitome of the barbarians.<sup>29</sup> I shall here attempt only a partial listing of depictions in architectural sculpture and some basic points.

Some episodes of battle against Amazons occur in the context of the deeds of heroes: Herakles must get the girdle of queen Hippolyte at their capital city, Themiskyra, and Theseus kidnaps Antiope, either as his own adventure or at the time of Herakles' expedition. These themes overlap and intermingle, and an Attic (?) version eventually has the Amazons attacking Athens to recover their queen, who is variously named Antiope or Hippolyte and has given Theseus a son, Hippolytos. Finally, a different but early story involves queen Penthesileia who goes to Troy to help Priam after Hektor's death and is at first quite successful, but is then killed by Achilles, who fatally falls in love with her as she dies. Folklore, love-romance, epic traditions, and even geographic/ethnic curiosity form the core of the various myths involving Amazons, and even historical (mis)information may have played a part in the tradition about these women-warriors, who were obviously considered real enough for

Pausanias ( 1.2.1) to point to the grave of one of them, Molpatia, as he enters Athens. Given the confusion of names and leg-

ends, each architectural depiction was probably influenced by its specific location.<sup>30</sup>

### *The Archaic Period*

Most of the earliest architectural sculptures (sixth century) are undetermined: a possible metope from the Temple of Hera at Foce del Sele (where the emphasis seems to be on women-of any kind?), a fragmentary pediment at Topolia, in Boiotia, another in terracotta at Corinth, a frieze at Apollonia in Epiros, and one more at Sicilian Selinous give no indication as to the specific version of the story involved, but testify to its wider (geographic; non-political?) appeal. More ethnically motivated are probably the many Amazons that appear on the metopes of the Athenian Treasury at Delphi, whether as part of the Deeds of Theseus (where he seems about to kill the female warrior) and Herakles, or of a more general battle (with no clue as to its location) that may involve all four akroteria-the dedicants of the structure justify the choice. On a religious level, the native hero Theseus is established on a par with the panhellenic Herakles. On a political level, if it existed, the allusion may be

to the aborted Persian invasion in 490; yet the quasi-victorious (i.e., Nike-like) riders on the roof may strain this interpretation—could a funerary meaning already accrue to these creatures?31

At Eretria, Theseus kidnaps Antiope not only in the late Archaic, but also in the replacement pediment after the mid-fifth century, where he is shown fighting together with Herakles. At Karthaia (on the island of Kea), inscribed labels show that the same rape episode was narrated in akroterial form. Both sites could be considered under Athenian influence, thus explaining the topic; yet the lofty location of an akroterion, even if for an Athenaion, seems to give this kidnapping scene an eschatological meaning somewhat surprising for the early time. As pedimental subject for a temple of Apollo, the Amazonomachy of Theseus is even more unexpected and difficult to reconcile with the god being honored: just an interesting, mythological story, or again an allusion to political events? Chronologically, Marathon is not yet an option, since the temple was destroyed at the time of that Persian invasion; but an allusion to the Athenian and Eretrian raid against the Persians at Ephesos and Sardis in

499 would be plausible. The Classical replacement would have repeated the theme out of religious conservatism, or perhaps even as a reaction to the Persian destruction. That geographic proximity to Athens and connection with Apollo are not sufficient justification for

the choice of the Antiope story is, however, shown by the west pediment of the Apollonion on Aigina, for which an Amazonomachy with Herakles and Telamon has been postulated instead. Here, the participation of the local hero is probably determinant, starting a trend that will have great currency in the Peloponnesos during the fourth century.<sup>32</sup>

### *The Fifth Century*

The tradition of the Amazonomachy on the Athenian Treasury seems to have been continued in Athens itself, with a building of unknown purpose and location, but likely to have stood on the Akropolis, since the fragments of a metope with a riding Amazon in high relief were recovered from its south slope. Its importance lies not only in its being probably the earliest structure erected by the Athenians after the ravages of 480-479 (perhaps even the earliest with decorated metopes in the city), but also in its subject, which seems the direct predecessor of the Parthenon west metopes. The latter, however, are surprisingly devoid of any indication about protagonists and locale-so much so that Frank Brommer, in his extensive treatment of the subject, would only state that the opponents are simply persons in Oriental costume. It should be stressed that the Athena Parthenos' shield, with its likely depiction of rough terrain and walls which the Amazons attempt to scale, is the *single* unmis-

takable depiction in sculpture of the Amazons' attack on Athens; all other Athenian representations, whether at Delphi or on other buildings in the city itself, given their fragmentary state or nonspecific idiom, could easily be read as Theseus' participation to the Themiskyra expedition, or his own travels to the land of the Amazons.<sup>33</sup>

Is the assault on Athens a permissible decoration only in connection with the city patroness, on the cult image itself? Would it have been an act of hubris, a transparent boast of self-glorification, to place it on an official building, if the myth was openly developed during the fifth century? Myth and tradition, as is well known, could be invented at any time, to serve specific purposes, but could they receive contemporary and public currency in the visual arts? I suspect that the answer is "yes," but I cannot avoid raising the issue, given the anomaly of the situation. I should also point out, however, that on the Athena Parthenos this Attic Amazonomachy receives place of honor, on the more visible exterior surface, as contrasted to the Gigantomachy on the interior of the same shield; yet this association of subjects not only had already occurred but

also seems to recur through time, albeit without the specific Akropolis localization.<sup>34</sup>

Elsewhere on Greek territory, including Athens, the myth continues to be framed exclusively within Heraklean contexts: at Olympia, at Selinous (Temple E) (cf. ill. 27), on the Hephaisteion, it is always the hero with a single Amazon, as part of his deeds. What Amazonomachy was shown on the Nike Temple pediment is now impossible to tell.<sup>35</sup> Expanded versions, as on gables and friezes, begin at the turn into the next century and may aim at glorifying local heroes.

### *The Fourth Century*

The building frenzy that had taken place in Athens after 450 was replaced around 400 by a similar spurt of activity in the Peloponnesos and Asia Minor, areas that had seen virtually no construction since the first half of the fifth century. Obviously Athenian monuments, with their aesthetic and cultural prestige, had some influence on the choice of subjects and even styles, but at least as early as Pindar's time the allinclusive story of the Themiskyra expedition had already added, to Herakles and Theseus, Peleus, Telamon, Iolaos, and, in the Theseus version, Peirithoos and Phorbas; later writers expanded the numbers to include Sthenelos and the Argonauts. Thus, virtually every area could lay claim to some local glory in connection with the Amazonomachy. In addition, the Trojan myth became particularly popular, perhaps for similar reasons. It seems clear, moreover, that allusions to Marathon or even to Plataia and the Persian defeat would have had lesser significance in re-

gions that had not seen the foreigner on their own soil. Whatever political meaning had attached to the depiction of Amazons, it was probably lost by the time the subject was treated at Bassai (cf. ill. 9), the Argive Heraion, Patras, Epidauros, Mazi, and the Delphic Tholos, all within the first half of the fourth century.<sup>36</sup>

The similarity of the sculptural themes between the Parthenon and the new Temple of Hera at the Argive Heraion-as well as the presence of both decorated metopes and gables on façade, unusual for the region-has been seen as a sign of strong Athenian influence. Certainly the many trained workmen in Attika might have dispersed elsewhere, taking with them patterns and traits of style. Yet the shift to Trojan topics is distinctive and seems to extend to the other Peloponnesian buildings. At the Athenaion at Mazi and the Epidaurian Asklepieion, the



Amazonomachy subject relocates from metopes to pediments, thus acquiring greater importance and visibility. Although at Mazi the remains are too fragmentary to reveal more than an "Oriental" opponent, at Epidauros (cf. ill. 19a) a high-riding Penthesileia occupies the center of the gable, thus taking the place usually reserved for a divinity. Since the east pediment shows the Ilioupersis (cf. ill. 19b), both compositions stress the Trojan theme with an emphasis that has a single precedent in late Archaic Aigina (cf. col. pl. 2), perhaps never to be repeated. Note, moreover, that the Amazonomachy could be considered an appropriate subject for Athena, but not for Hera, with her animosity against the Trojans. Even Asklepios lost a son to Penthesileia, as already mentioned (chapter 3). It is therefore the participation of local heroes, rather than the intended gratification of the deity, which determines the choice of themes for architectural

sculpture—a pattern clearly repeated at Tegea, with its purely topical subjects.<sup>37</sup>

If the Delphic Tholos is a heroon, a funerary meaning may have been implicit in its Amazonomachy, as already suggested for its Kentauro-machy, and may have continued, approximately a century later, the possible allusion of the akroterial Amazons on the Athenian Treasury at that site. Others believe that the funerary meaning accrued to the legend for the first time on Asia Minor territory, albeit in non-Greek monuments. Not one, but two Amazonomachies occur on the precinct walls of the Heroon in Lykian Trysa (cf. ill. 37); yet the Lykians, like the Amazons, were traditionally allied with the Trojans and should not have emphasized a theme of defeat. Since however other subjects of this elaborately decorated temenos depict epic and heroic myths, the intent may have been to rank the deceased among other legendary heroes with their promise of afterlife.<sup>38</sup>

The Amazonomachy frieze at the Halikarnassos Maussolleion (cf. ill. 22) is perhaps the best known sculptural element of this most elaborate Karian tomb. Here the allusion cannot be to the Persians, in any form, since Maussollos was a faithful subject of the Great King, even taking his side during the Satraps' revolt; the female warriors, moreover, have lost virtually all Oriental traits. The double axe of the Amazon queen Hippolyte was said however to be kept at the main Karian sanctuary of Labraunda, where it was placed by Herakles, thus perhaps justifying the choice of subject. The theme is undoubtedly Herakles' expedition to Themiskyra, thus the supposed imitation of Athens, which has been advocated by some modern commentators, may have been less obvious to

the ancient viewers. More plausible is however such imitation on the coffers of the Athenaion at Priene, which illustrate both a Gigantomachy and, in only a few panels, an Amazonomachy.<sup>39</sup>

### *The Hellenistic Period*

The funerary meaning seems to spread with a vengeance during the late fourth and the third centuries. It recurs at Mylasa, and it returns to Attika in the frieze of the so-called Kallithea Monument, where perhaps it is the famous Karian tomb that is being imitated, rather than any Athenian topic. Remains of at least two other friezes must come from similar structures in Athens, and classify as architectural sculpture, despite their relatively modest size as compared to temples; they were certainly in public view, and belonged to ordinary citizens, even foreigners, who had no military associations. No direct influence, either from Athens or from the Mausolleion, can however be attributed to the many Amazonomachies in soft limestone decorating funerary naiskoi at Taras. They share the epic character of other Trojan or Homeric themes, making potential heroes of all the Tarentine dead.<sup>40</sup>

All other Hellenistic examples may come however from temple structures. The most uncertain is probably the series of four metopes from Sparta, showing warriors fighting Amazons; they were found reused in a later context and have not even been dated with precision, the suggested chronology ranging from the fourth to the first century B.C.E. Given the very sparse record of architectural sculpture from Lakonia, and the possible echo from a local Archaic Athena with decorated shield, this Doric frieze is of particular interest.<sup>41</sup> Six more instances take us back to the eastern region. The most extensive Amazonomachy occupies the four sides of the large Artemision at Magnesia (cf. ill. 15). A frieze from Teos, one from Cypriot Nikosia, one from the Apollonion at Alabanda, in Karia, complete the listing. The allegorical nature of the frieze Amazons on the Hekateion at Lagina places them outside the

sphere of Amazonomachies, but attests to their currency and importance on Asiatic territory.<sup>42</sup>

It is impossible to tell, in most of the above cases, which specific Amazonomachy is depicted; but no doubt exists about the subject of the Artemision frieze at Magnesia (cf. ill. 15): Herakles is shown on three sides, and such gaps occur within the fourth side that it is logical to postulate the hero appeared there as well. The choice of subject is however

surprising: Herakles is not a particular favorite of Artemis, whereas the Amazons certainly are. To show them in an episode where they were defeated, at least to the extent that their queen was robbed and killed, seems a peculiar way of honoring the goddess. It is logical to conclude that, by the second century, all political implications of the subject were abandoned, only general mythological associations were sought, and the choice of a story that permitted extensive lengthening took precedence over other considerations. The Amazons, moreover, are depicted as a motley group, with different costumes and weapons. One of these is however significant since it is a peculiarly Skythian form of axe, no longer used in the Hellenistic period and probably a "fossil" derived from pattern books and a time when the Amazons were thought to reside in the north, not in the east.<sup>43</sup>

The Amazonomachy as a topic, therefore, would seem to demonstrate best the point that legends carry different meanings and values according to place and time. One more subject completes the triad of popular myths in architectural sculpture: the Gigantomachy.

## The Gigantomachy

As contrasted with the previous two legends (Kentauromacy and Amazonomacy), only one basic version prevails for the Battle of Gods and Giants, but the impact of the myth is made more powerful by the fact that divinities, the very Olympians, not mere heroes, are involved. The subject is therefore the perfect metaphor for the triumph of a righteous party over a hubristic and unlawful enemy; in addition, it is suitable ornament for the temple of any deity who took part in the fray. Its drawback is that it cannot be expanded indefinitely, since the main protagonists are dictated by tradition. It would take the scholarship and aesthetic freedom of the second century to mobilize the forces of the sky, Olympos, and the sea in that great choral action that we call the Pergamon Altar frieze.

Because of its "loaded" meaning, the Gigantomachy has been variously read by modern commentators and, it is presumed, by ancient viewers. Its importance at Athens focused on the Akropolis, from which, significantly, the earliest Attic Black-Figure representations come, because Athena was instrumental in the victory, since she secured the help of the human champion-Herakles-that was needed to bring about the triumph of the Olympians. Aristotle considered Athena's victory in this encounter the *aition* for the major festival of the city, the

Panathenaia, and episodes of the Gigantomachy were woven on the peplos being offered to the goddess in that occasion. At Pergamon, the self-styled Athens of the East, a similar feast was instituted, and sculptures commemorating victory through the Gigantomachy were dedicated both on the Asia Minor citadel and on the Athenian Akropolis (there, together with Amazonomachy, Persikomachy, and Galatomachy). Yet the story had a wider currency than in Athens and Attika, and was especially popular during the Archaic period, although it never disappeared entirely from the architectural sculpture repertoire. 44

We have already mentioned the known instances in which the Gigantomachy was used in conjunction with the Amazonomachy or the Kentauro-machy, and these are relatively widespread through time; a fourth subject seems to form an occasional counterpart to the divine battle, and is chronologically and numerically more limited and therefore perhaps more significant: the Ilioupersis. Besides a dubious case on the pediment of the Archaic Artemision at Corfu (ill. 38), the earliest combination, according to Diodoros (13.82.4), is on the two pediments (?) of the Olympieion at Akragas. The next ones are on the Parthenon metopes, east and north respectively, and on the Argive Heraion (possibly the pediments in both cases). The metopes of the Athenaion at Ilion mark the last known appearance of the two stories together.

This last case seems easy to explain; it should allude to the Parthenon in Athens, although the representation of the city's own defeat and fiery destruction must have been a painful subject at Troy. By the late fourth century, however, its citizens were probably quite proud of their ancestral history and their place in the epic, and a learned connection to Athens, "the school of Hellas," may have been considered more significant than the message of "righted wrong" implicit in the story. At Akragas, at least by Diodoros' time (ca. 60-30 B.C.E.), the two subjects were obviously read as allusion to the Sicilian Greeks' victory over the Carthaginians. Yet there are few themes appropriate to Zeus-as already experienced by the planners of the Olympia temple, who reverted to local stories, connections by presumed paternity (Peirithoos and Herakles as sons of Zeus), or moralistic admonitions. The destruction of Troy was ultimately due to Zeus' decision to depopulate the overpopu-

lated earth, and the Gigantomachy was his most explicit affirmation of power; thus both subjects were particularly suited to decorate his temple, and would have had lasting religious and mythological value regardless of historico-political

circumstances. At the Argive Heraion, allusions to Athens are again conceivable; yet Hera was directly involved not only in the Gigantomachy, but also in Troy's destruction-together with many Peloponnesian heroes and royal families-thus making the selection more understandable as part of that revival of Trojan and epic themes already discussed above. The only unusual case remains the Parthenon itself.

To be sure, the Gigantomachy is a perfectly obvious choice, given Athena's role in it. The Ilioupersis metopes are so poorly preserved, however, that only the sequence of two panels (N 24-25; Helen being protected from a threatening Menelaos by Aphrodite and Eros) confirms the current interpretation. Erika Simon has argued that the last three metopes on that side (N 30-32) represent the antecedents of the destruction-Zeus' determinant will, mentioned above; and the temple's owner, Athena, after all, is Zeus' daughter. Yet she was also Ilion's main goddess, although she sided against the city in the final outcome. I still have my reservations about the subject having been chosen as a further allusion to the Athenians' victory over the Persians, since the Trojans, at least in Homer, were not considered ----- or Orientals, and only a need for definition occasionally supplies an exotic costume for Paris. Perhaps the presence of Theseus' mother Aithra at Troy, and her rescue by

Theseus' two sons, Akamas and Demophon, made the episode pertinent for an Athenian audience. It was also, as already suggested, a subject that could be conveniently stretched over several panels. 45

It now remains to see what the Gigantomachy itself may have meant, at Athens and at Delphi, during the Archaic period, especially since modern commentators have been able to argue conflicting interpretations with equally convincing arguments. The Gigantomachy on one pediment of the Old Athena Temple on the Akropolis (by some thought to have been the western gable, by others, the more important eastern) has been hailed both as a statement by the sons of Peisistratos (whose father, like a new Herakles, was brought into the city by "Athena"), and as a creation of the new Democracy under Kleisthenes, after 510 B.C.E. The Gigantomachy on the (undoubtedly) west pediment of the Temple of Apollo at Delphi has been considered part of the initial, local program, or, conversely, under the influence of the Alkmeonids who completed the structure. The North frieze of the Siphnian Treasury (cf. ill. 25) has been seen as a Delphic admonition against Peisistratos and his allies,

whereas the possible Gigantomachy on the pediment of the Athenian Treasury was accepted as a message of the democracy. In each

case, chronology is involved, since a shift of one or two decades, toward the end of the sixth century, can make a great deal of difference in our historical readings-tyranny versus democracy, old versus new regime, Peisistratos as both a "Giant" and a new Herakles. At this point, it may be helpful to remember that a full Gigantomachy sequence appeared on the eastern metopes of Temple F at Selinous, where no specific allusion to Athens and Delphi seems possible.<sup>46</sup> It is therefore important to express an opinion about this methodological quagmire.

We know too little about the monuments involved to make statements with confidence. Even ancient sources providing historical or quasi-historical dates and correlations may be misleading, since their primary purpose was not to date buildings but to describe events, often with remarkable compression. In addition, many current reconstructions of sculptural themes are uncertain and, given the few extant fragments, are based primarily on plausible assumptions and perceived popularity of subjects. Finally, we should be aware that we tend to focus on what we have, what is best preserved, that therefore becomes all-important in our interpretations, omitting the possible impact of what is missing, which however could alter the total conception of the sculptural program. A clear example of this modern attitude is the Mausoleion at Halikarnassos (cf. ill. 22), whose Amazonomachy frieze was the focus of attention and attribution to main masters until it was realized that it

formed a minimal part of the vast sculptural embellishment of this grandiose tomb.

Historico-political investigations have been helpful, especially in establishing that certain myths, or at least certain versions of them, were invented or received acceptance at different times.

Here again, however, we miss the evidence of the oral tradition, which might have promulgated a specific story long before its manifestation in the visual arts. Or we may lack the text of a play (obviously accessible to vast audiences) that triggered a new iconographic trend-as seems to have happened with Leda and the Swan, which appear for the first time in sculpture (as akroterion?) after Euripides' *Helena*, produced in 413.<sup>47</sup> Through the episode of Kaineus, moreover, we have become aware that a myth may include aspects (in this case, transformation from woman to man and vice versa) that never find expression in sculpture or painting.

It seems obvious to us that narrative sculpture on a temple was meant to make a religious statement. Yet it should be pointed out that contemporary votive reliefs (undoubtedly religious in purpose) focus on

symbolic representations and almost totally avoid mythological subjects. These latter are however acceptable, as it seems, to decorate the bases of divine images within temples, thus raising the question whether these pedestals should be considered in our attempts to construe the intended message in its entirety. 48

In general terms, with caution, it could be stated that certain topics tend to acquire eschatological, if not specifically funerary, connotations as time progresses, and especially during the Hellenistic period, or, earlier, in areas where the emphasis on the ruler allows for elaborate tomb structures. As apparent in the practices of ancient religion during the fourth century, focus seems to shift from the major divinities to the local healing or ancestral heroes, who receive place of honor on gables, often to the total exclusion of the gods. From the second century onward, the gods appear to return to a position of prominence, but perhaps out of erudition or evocative admiration of Athens and its past monuments.<sup>49</sup> In conclusion, however, we must admit that we have no way of knowing what a specific topic meant to the planners of a building, although we can be fairly sure that its message was read differently from generation to generation. When the original intent was forgotten, different motivations for the

choice were probably advanced and different identifications proposed for various figures, as anecdotes and guides' tales grew around them. As semiotic studies have shown, each text, whether literary or visual, has an indefinite and infinite context, and we cannot rid ourselves of our own experiences and present notions to look at the past through ancient eyes, even if the effort should definitely be made.<sup>50</sup>

## Notes to Chapter 5

1. The more extensive account of the myth is Apollod. *Bibl.* 2[119-21].5.11; but the story is already told by the mid 5th-c. Pherekydes (*FGrH* 3 F 16, 17). For all pertinent iconographic information and commentary, see *LIMC* 5, s.v. Herakles, 100-11: the Olympia metope is no. 2683. To be sure, the Olympia panel may present a different version of the story, one in which no deception is involved, and in which Herakles may have provided himself with a pillow from the start, thus further ensuring that the viewers readily identified the hero-a helpful hint, given the remarkable reluctance of the Olympia master to show Herakles wearing the distinctive lion skin.

2. For this description, see Athen. *Ps.* 6.24 , where Eukrates, complaining about the dilapidated condition of his guest's house, states: "In this place one has to dine with the left hand supporting the roof like the Karyatids" (= Schmidt 1982, 15 no. 2). All ancient passages on Karyatids and Telamones (and supporting figures in general) have been conveniently collected by Schmidt

1982, 15-21. Note also her p. 166 n. 11 for the citation of Strabo 6.263 as a parallel to Athenaios' passage: the report that the famous athlete Milon of Kroton supported with his hand the roof of a collapsing room at a Pythagorean symposium. In his review of Schmidt 1982, Linfert 1984, 732, points out that the concept was therefore an accepted *topos*, although the two passages had not been previously connected.

3. See, e.g., Ridgway 1993, 291 (Olive Tree Pediment) and 319 n. 7.32 (also in the 1977 edition of that book, pp. 204205 and n. 24); also Linfert 1984, 732.

4. J. Bravo has alerted me to a passage in Euripides *Iphigeneia Taurica*, vv. 5057, in which Iphigeneia relates her dream: she has seen the central column of her house topped with golden hair (*xanthas komas*), and she equates it with her brother Orestes, since "sons are like the columns of a house." Euripides' statement could also imply a positive connotation for Karyatids and Telamones. This ancient passage is cited with reference to columns by Onians 1995.

5. Even the Limyra Karyatids (cf. ill. 34) are reconciled by Vickers 1985 (p. 26) with the anti-Persian theme, since the Lykian Perikle participated in the Satraps' revolt against Persia, and the statues of his heroön hold rhyta of a typical Achaemenid shape.

6. It is futile, in this context, to attempt a refutation of both Plommer's and Vickers' arguments; the latter have been well answered, e.g., by Amandry 1988, 59396. The earlier date of the Erechtheion project has been confirmed by finds of reused material from the earlier propylon in the foundations of its north wall as well as in those of the Mnesikleian Propylaia, thus suggesting that both structures were started at the same time: "Chronique des Fouilles," *BCH* 112 (988) 612. See now also T. K. Dix and C. A. Anderson, "The Eteocarpathian Decree (*IG* I3, 1454) and the Construction Date of the Erechtheion," Abstract, *AJA* 101 (1997) 373. The blue stone of the frieze may be influenced by statue bases and other architectural practices, as argued supra, ch. 4, rather than by economic restrictions.

7. The citation is from Vickers 1985, 27. Note that the Erechtheion Karyatids do not carry the heavier entablature of the rest of the building, but only architrave and dentil course, in the first instance of this combination in Attika (cf. fig. 6). The carved echinos on their heads recalls the other Ionic capitals, and the entire porch is certainly in the Ionic "order"; yet Vitruvius, as pointed out by Plommer 1979, 97, describes his "women of Karyai" as holding up *mutulos et cornas*, therefore a Doric entablature.

8. Hersey 1988, 6975 (including discussion of Vitruvius' Persian portico); Bammer 1985, 64. Women athletes in Sparta: Serwint 1993, esp. 42021.

9. Wesenberg 1984, esp. 17677, 185; he also points out that in Vitruvius the Persians of the Spartan stoa carry the epistyle and its *ornamenta*, whereas the Karyatids are given only mutules and sima, like those in the Forum Augusti. Wesenberg's entire article stresses the architectural parallels between Augustus' forum and buildings on the Athenian Akropolis. Schneider 1986, 10314, esp. 106, and 12529, gives several examples of Imperial date in which female figures with arms raised alternate with barbarians; see esp. his n. 700 and *Öjh* 54 (1983) 32 fig. 7, for a Trajanic ivory frieze from Ephesos (additional bibliography in Fleischer 1983b, n. 1). The alternation of male and female support figures is however attested since the late 4th c., and perhaps (at Akragas) even as

early as the 5th: see *infra*, n. 13. For comments on the Roman terminology used by Vitruvius in describing Karyatids, see also *supra*, ch. 1; additional bibliography in ch. 2, ns. 24-26.

A. A. Donohue points out to me that the Romans tended to portray prisoners of war in the ethnic costumes typical of their origins; here, however, according to Vitruvius' version, the women of Karyai would be shown not as prisoners but as slaves, and within Lakonia itself.

10. In matters of terminology, it should be noted that we have no clear ancient nomenclature for either the Karyatid- (those of the Erechtheion were called "korai" in the building accounts) or the kore-type; for the latter as metal objects in Athenian records, see C. M. Keesling, "The Kore as a Sculptural Type on the Athenian Akropolis," Abstract, *AJA* 100 (1996) 367. For the Erechtheion building accounts, see Schmidt 1982, 19 no. 20. On the Akanthos Column and its Karyatids, see, e.g., Ridgway 1990, 2226, with bibliography.

Karyatids with raised hands, in tombs: Ridgway 1990, 17880, ill. 26 (Rhodian tomb, drawing); cf. also Capecci 1994, figs. 1004 (Rhodian tomb, photograph) and 1003 (Sveti Tomb, in Thrace, although that figure has both hands raised, in the so-called "open Atlas" pose, and qualifies as a Rankengöttin/Karyatid—the sole example of the type known so far). P. A. Webb tells me that all representations of what she calls *akanthos* figures in Hellenistic Asia Minor have their arms outstretched to the sides holding tendrils and that their *poloi* is the only visually supporting element; see, however, Webb 1996, 5556, fig. 142, a capital from Cyprus with a raised-arms *akanthos* figure. According to her evidence (pp. 3233), the *akanthos* figures are connected specifically with Artemis and/or Apollo and with their father Zeus.

The theory of the funerary connotation is advocated by several scholars, especially Schmidt-Colinet 1977: see also Schmidt 1982, esp. 205 n. 640, and her reaction to the concept, albeit criticized by Linfert 1984 as too radical. Some examples of Karyatids, perhaps some of the earliest, were undoubtedly funerary. The most recent case for the Erechtheion Karyatids signifying the cult for the dead over the tomb of Kekrops is made by Scholl 1995. The Limyra Karyatids on the Heroon of Perikle (supra, n. 5) could be considered both funerary and allusive, in their reference to Perikleian Athens.

11. Amyklai Throne (the Tomb of Hyakinthos, therefore perhaps also with funerary overtones): Schmidt 1982, 19 no. 21; for a recent discussion of its iconographic (political) meaning, see Faus-toferri 1993 and 1996 (dated mid-6th c.). Siphnian Treasury Karyatids: Schmidt 1982, 7475, and (on all Delphic examples) Appendix on pp. 23-33; comments on their size and non-integrated pose: Capecchi 1994; new fragments from the polos, with Dionysiac scene: Themelis 1992. Smaller Karyatids at Delphi: Schmidt 1982, 7576, 233; Linfert 1984, 732, suggests the connection with Dionysos' grave. Lyons Kore: Ridgway 1993, 14748, with bibliography. In October 1995, Alain Pasquier kindly informed me orally that a new study of the fragment in Lyons will disprove its architectural connection, but I have not yet seen it published. The reverse imaging of the Karyatid pairs could, of course, be considered a sign of integration with their respective buildings.



Because of their non-architectural nature, I do not consider here the 7th-c. perirrhanteria, despite the monumental size of the example from Isthmia (e.g., Ridgway 1993, 2627, ill. 14), which could however be significant for the religious implications of the female supports; its appearance is perhaps closer to architecture than our limiting definitions would acknowledge. Large-scale figures, Karyatid-like, were also placed "under tripods" by various sculptors, including Praxiteles (*IG II/III*2 3089; a choragic victory); other tripods stood at Amyklai, commemorating the military victory at Aigospotamoi in 405/4: Paus. 3.18.8. For discussion of these monuments, see, e.g., Ridgway 1997, 2333n. 59, and 25152 respectively.

12. Pausanias' account of the Persian Stoa (= Schmidt 1982, 19 no. 19) differs from Vitruvius' (= Schmidt 8, no. 18), in that the Greek text speaks of figures *above* ( ἐπὶ ) the columns, whereas the Latin has "the prisoners arrayed in barbarian costume... holding up the roof" (*sustinentia tectum*; Morgan trans.). Levi 1971, vol. 2 p. 38, renders the Greek text as: "One of the Persians carved in marble on the pillars is Mardonios. There is also a sculpture of Artemisia . . ." Schneider 1986, 109, acknowledges that Pausanias' description is more in keeping with the Hellenistic period, but stresses that the stoa was embellished through time, as stated by Pausanias: "it [the Persikel] was altered in the course of time until it reached the size and the decorative splendour you now see." Coulton 1976, 39, notes that all stoas of the early 5th c. were fairly simple and finds it difficult to visualize a building "of the sort commonly called stoa with all its columns replaced by figures." He

would therefore believe Pausanias rather than Vitruvius, since the former had seen the structure in person. If, however, the barbarian images were above or on the columns, as Pausanias writes, Coulton (*ibid.*, n. 3) would consider the Ephesian *columnnae caelatae* as the only precedent for such applied figures. Perhaps those of the Didymaion provide a better parallel.

For the terracotta of the supporting barbarian, see Plommer 1979, pl. 5c; Schneider 1986, 10914, pl. 33.23, and cf. his n. 739 for an account of its context.

For the equation Akragan Atlantes = Carthaginians, see the discussion and references in Schmidt 1982, 113 (she is personally undecided).

13. It should be pointed out that Pausanias uses the expression *ἐπί τῶν κιόνων* elsewhere to allude to architraves, carved metopes and possibly pedimental sculpture (see supra, ch. 1 and n. 46); he could therefore be referring to a balustrade, like the weapon frieze of the Athena Sanctuary at Pergamon. Plommer 1979 believes that the "Artemisia" mentioned by Pausanias should be considered a separate image unconnected with the Persian supports, yet the Greek text could allow a connection. Magna Graecian male-female combinations: see, e.g., Ridgway 1990, 17677 and ns. 2627 (satyrs and maenads from theater and tomb structures); add a possible redating by Wilson 1990, 6971, who believes inspiration for such couples came from the Syracusean theater as enlarged by Hieron II in 238 B.C.E. We may, however, recall here the even earlier alternation of satyrs and Nymphs, as antefixes, on Magna Graecian buildings: supra, ch. 2 n. 66.





More significantly, an alternation of male and female supports on the Olympieion at Akragas is advocated by B. Barletta: "The Temple of Zeus Olympios at Akragas: Archaic Temple or Early Classical Monument?" Abstract, *AJA* 101 (1997) 370. Her theory, which would disassociate the rendering from the victory over the Carthaginians, is based on the beardless faces and the looping hairstyle of some of the extant Telamones. She believes moreover that the colossal figures, seen between the columns, might have given the impression of statues in a stoa, and have suggested the Gigantomachy mentioned by Diod. Sic. 3.82.14. (The manuscript version is usually emended to read "pediments" instead of "stoas": cf. De Waele 1982, esp. 27374.) For an earlier (ca. second half of 3rd c.) mention of "bicorpores Gigantes Runcus ac Purpureus quomodo Titani magnique Atlantes," see Naevius *Bellum Punicum* frg. 19;

Rowell 1947, 3235, interprets the last named as a description of the Telamones at Akragas (I owe the Rowell reference to Prof. C. Mur-gia). Prof. Barletta also tells me that a recent Ph.D. dissertation (*non vidi*) by Pieter B. F. J. Broucke supports an earlier (and usually dis-regarded) theory that the Akragan figures stood on the inside, not on the outside of the Olympieion; see now his Abstract, "The Gi-ants at the Temple of Olympian Zeus in Agri-gento: A Reassessment of Their Original Position and Function," *AJA* 100 (1996) 367, and cf. Schmidt 1982, 11214, esp. 208 n. 679 against an interior placement. Schmidt (200 n. 694) also is not in favor of a comparison between the Herakles on the Olympia metope and the Akragan Atlantes; but the Peloponne-sian sanctuary was so open to influences from Magna Graecia at that time (and earlier) that the connection seems to me not only possible, but convincing. Note, in particular, Herakles' nudity.

Sacred versus secular buildings: the distinction is often difficult to make, but note that the historical Battle of Mantinea, and perhaps also that of Oinoe, were the subject of paintings in Athenian stoas: Paus. 1.3.4 (Stoa of Zeus, by 4th-c. Euphranor) and 1.15.2 (Stoa Poikile, by unnamed painter) respectively.

14. Date of the raised-arm type: e.g., Capecchi 1994. Siphnian Treasury E frieze: Vickers 1985, 14 and figs. 56 (for a comparison with a Persian rendering); in keeping with his own redating and interpretation of the building, Vickers sees the scene in a Dionysiac contest which "was another way of saying 'we beat the Persians.'" On the other hand, the satyr's head touches the armrest of the throne, thus helping to support it for all practical purposes. Moreover, as Kim Codella reminds me, the message inherent in the imagery of the Persian King's throne being lifted on the arms of his subject is a joyful one, not an expression of servitude and punishment.

If I am correct in my reading of the Olive Tree Pediment as a ProtoErechtheion with Karyatid, the female type with one raised arm would be as early as ca. 560 B.C.E.: Ridgway 1993, 291 (= 1977, 204).

15. This point is also made by Capecchi 1994. He suggests that some of the meaning of the male supports may have accrued to the female ones by association, especially for the Hellenistic Karyatids of Magna Graecia who carry their load with both arms, but he seems to refer to the "punitive" rather than to the Dionysiac aspect.

16. The entry on "Kentauroi" did not appear in the *LIMC* in its proper alphabetical sequence, but is now included in the Supplement section at the end of



vol. 8 (see *infra*). Much of my information for the early phases is, however, derived from the excellent M.A. thesis by G. Szeliga (Bryn Mawr College, 1977), which in turn was based on publications available to that date. The antiquity of the centaur on Greek soil has been attested by the discovery of the ProtoGeometric terracotta statuette at Lefkandi (Euboia): *LIMC* 8, Suppl., s.v. Kentauroi et Kentaurides, no. 20 pl. 417; cf. *LIMC* 3, s.v. Cheiron, no. 1 (dated 900875). Note that the creature seems to have a wound on one knee, therefore implying a (previous) hostile encounter; the *LIMC* entry, however, focuses on Cheiron's persona as teacher of heroes, specifically Achilles. Only one item (no. 106, pl. 197: a 5th-c. gem showing a branch-carrying centaur apparently trying to touch a wound on his back) is listed as an uncertain representation of Cheiron's fateful harming by Herakles.

According to my count, the architectural sculptures in which at least one fighting centaur appears (even if as part of Herakles' Deeds) in connection with a Gigantomachy are: (1) the Parthenon (S vs. E metopes); (2) the Treasury at Foce del Sele (where gods are seen battling Giants, but perhaps as isolated stories rather than within the Gigantomachy). Other debated and conjectural instances are: (3) the Athenian Treasury at Delphi (Herakles and Centaur in metope; possible Gigantomachy in pediment); (4) the Archaic parapet and the 4th-c. pedestals of the Artemision at Ephesos (postulated for both themes); (5) the Temple of Poseidon at Sounion (E frieze = *LIMC* 4, s.v. *Gigantes*, no. 17, ill. on p. 201; but open to different interpretations: see Felten and Hoffelner 1987, who argue for Kentauroromachy and Kalydonian Boar Hunt); (6) the Temple of Athena at Ilion (based only on two heads with wild fea-

tures that could belong to Giants instead: cf. Ridgway 1990, 152). Note, however, that while Kentauromaches can appear on both religious and funerary structures, the Gigantomachy occurs solely on sacred buildings.

The Kentauromacy examples occurring with an Amazonomachy are: (i) the Athenian Treasury (metopes); (2) the Parthenon (metopes); (3) the Apollonion at Bassai (friezes); (4) the Tholos at Delphi (Athena Pronaia, metopes); (5) the Heroon at Trysa (walls); (6) the Halikarnassos Maussolleion (friezes). A seventh possible instance is on the Temple of Zeus at Olympia, where the Kentauromacy of the west pediment could be correlated with metope W 6 (Herakles and the Amazon). One more example would be the Hephaisteion (W frieze and W pediment), if an Amazonomachy can be reconstructed for the gable: see *infra*, n. 35.

The narrative *kosmos* of the Athena Parthenos (Kentauromacy on sandals, Amazonomachy and Gigantomachy on shield) cannot be considered architectural, although it is probably influenced by the total sculptural program of the temple. See also infra.

17. Of the various centaurs individually associated with Herakles, besides the brief reference s.v. Cheiron (*supra*, n. 16), only Nessos rates an entry in alphabetical order in the *LIMC*: vol. 6, s.v. (F. Diez de Velasco), with commentary on pp. 84447; p. 839 points out that a great deal of homonymy and identity of action occurs in the episodes of Herakles defending Deianeira against Nessos, Eurytion, and even Dexamenos, which make the distinctions unlikely. Nessos too is, in some sources, connected with the events at Pholoe. On Pholos, see



now *LIMC* 8, Suppl., s.v. Kentauroi et Kentauroides, pp. 706707 and, on the Pholoe episode, p. 672. The earliest literary evidence for the Pholos myth is a fragment of Stesichoros preserved in Athen. *Deipn.* 11.499 A. The South Italian origin of the 6th-c. poet may be significant in explaining the use of the story on the Foce del Sele Treasury. Pausanias mentions that the episode was depicted on the Amyklai Throne (3.18.10) and the Chest of Kypselos (5.19.2). An early example is on a painted metope from an unidentified building at Thermon, which is inscribed Phlols: Rhomaios 1916, 187; *LIMC* 8, s.v. Kentauroi, no. 368 (dated 625600). Although elements of the legend are mentioned throughout the Classical period (e.g., in Soph. *Trach.* 1095ff; Eurip. *Herc.Fur.* 181ff, 364ff, 1271ff), the first full account is by Diod. Sic. 4.12.3 (wine left by Dionysos for Herakles; Pholos dies; see also 4.25.4 for

purification required for Eleusinian Mysteries), the second by Apoll. *Bibl.* 2.5.4 (both Pholos and Cheiron die; wine belonged to centaurs). All sources are discussed by Colvin 1880, 11116, esp. 11314, and are now listed in the *LIMC*. A critical account, with copious bibliography, appears in Wescoat 1995, 296 and ns. 2228. The Apollodoran version would justify the centaurs' attack to defend something that belonged to them; the Diodoran version implies a breach of the laws of hospitality by the centaurs and thus the required purification seems unnecessary, since Herakles was defending himself and what was allegedly his property. For additional comments on this point, see also *infra*, n. 21.

18. Assos epistyle: see, most conveniently, the drawings in Boardman 1978, fig. 216, slabs nos. 56 (fleeing centaurs), 78 (attacking centaurs); also Wescoat 1995, figs. 11.217, esp. 11.912; photographs appear in *LIMC* 8, Suppl., s.v. Kentauroi et Kentaurides, no. 282 pl. 450, no. 370 pl. 457. Reconstruction of the sequence of blocks is uncertain, and awaits the forthcoming publication of a re-examination of the Assos temple by B. Wescoat, which includes newly found reliefs. Note that a galloping centaur with branch (and fragments of another) occurs on an Assos metope: Boardman, fig. 216, slab no. 21 (with mention of no. 22). The strong Athenian affinities of the Assos temple do not seem significant in this respect, since the Pholoe Kentauromachy is not explicitly attested so far in any Attic sculptural monument: cf. *LIMC* 8, pp. 709-10, where the introduction of the myth to Attika after ca. 540/30 is connected with Dionysos' popularity. See also infra, n. 20.

Other examples in stone from Asia Minor include the Artemision parapet at Ephesos, as mentioned above, and a single centaur in a poorly preserved scene of the bottom register on the rear of the Sardis Shrine (see, e.g., Boardman 1995, fig. 207; Ridgway 1993, 387).

Foce del Sele Treasury: again, most conveniently, Boardman 1995, fig. 162. , metopes nos. 16; note metope no. 11 with a centaur (Eurytion) almost identical to the Pholos sequence, that is however connected with a shooting Herakles defending Deianeira (metope no. 10); the Nessos metope, with the close encounter, is no. 17. The redundancy of two such episodes is surprising, and Szeliga 1977, 30, wonders whether the "Eurytion" of metope 11 may go with the Pholos sequence, perhaps turning the corner. The latest discussion of the Treasury is Conti 1994; for chronology, see supra, ch. 3 n. 31. Another ex-



ample from Magna Graecia, according to Szeliga's interpretation, may occur on the terracotta metopes of Temple B at Himera, Sicily.

Szeliga 1977, 12632, believes that the Assos and the Foce del Sele depictions of the story derive from two different traditions, the first "a reflection in stone of local trends in [architectural] terracotta," the second "compositionally and technically representative of western methods of narration" continuing into the Classical period. I agree with the first theory of derivation, but would emphasize the "continuous-frieze" type of narrative of the early sculptured metopes (as mentioned in ch. 3), which may suggest similar derivation. The use of independent units of composition, whether duels or single figures, may have been helpful in a metopal arrangement to either stretch or compress a subject to the desired length.

19. Thasos raking sima: Winter 1993, 25758, pl. 106 (also Launey 1944, 15051, fig. 86); Herakles archer on antefixes, from Mytilene, pl. 110 and p. 263 with statement on distribution of scenes of Herakles fighting centaurs. For the Amyzon revetment, see Akerström 1966, 117 pl. 59, and cf. his pp. 1011, pl. 4.45, for the Neandria revetments, his pp. 12326, pls. 6465, for the Akalan plaques. These and other examples on architectural terracottas were collected by Szeliga 1977; the entries in *LIMC* 8 are selective and mention only the frieze plaques from Larisa, no. 284, as problematic.
20. For the theory of the story's connection with the hunt and relatively primitive society, see Szeliga 1977, 14547. Wescoat 1995 explains the Kentauroomachy at Assos as a contrast to the symposium scene on the same architrave, opposing the civilized world of the polis to the competitive sphere of battling monsters and animals.

Athenian Treasury metope: Boardman 1978, fig. 213, metope no. 6; *LIMC* 8, s.v. Kentauroi et Kentaurides, no. 283. It is unsure, however, that the metope shows Herakles with Pholos.

On the replications of combats, see supra n. 17.

21. Osborne 1994, esp. 8284. He discusses in detail the Temple of Zeus at Olympia (west pediment), the Parthenon metopes, and the friezes of the Temple of Apollo at Bassai, but merely lists the representations on the Hephaisteion and the Temple of Poseidon at Sounion. A more thorough listing of the Thessalian Kentauromachy appears in *LIMC* 8, Suppl., s.v. Kentauroi et Kentaurides, pp. 67172 and nos. 21117, 22027, pls. 43041.

The Olympia pediment has proved difficult to reconcile with Zeus and the Games.

Among the recent interpretations, see Sinn 1994, who views it as a need to stress the equality of all the Greeks after their uneven participation in the Persian wars; Apollo would be acting as spokesman for his father Zeus. Sinn considers the Kentauromacy the myth of fratricide par excellence, thus rendering it unlikely as an allusion to the Persians. It strikes me that *both* the Kentauromacy at Pholoe and the one at the wedding feast involve a breach of the laws of hospitality, and both are triggered by wine. The difference between the two myths would therefore not be as great as generally believed. It should also be emphasized that the whole Temple of Zeus was planned and built by the Eleans with the spoils of their victory over Pisatetherefore a local occurrence without

the panhellenic overtones that modern commentators have sought to find in its sculptural program. The Chariot Race between Pelops and Oinomaos, on the east pediment, could be read as commemorating the defeat of the Pisatan king, therefore as an allusion to the historical event: see Riedel 1993. A comparable interpretation is given by Kyrieleis 1997: by implying a close relationship between Zeus and Pelops through the positioning of the pedimental figures, the Eleans would be trying to legitimize their expansionistic policy over the entire Peloponnesos.

22. Homeric reference: *Iliad* 1.264. Other references occur in Hesiod, Pindar, et al.: see *LIMC* 5, s.v. Kaineus (E. Laufer), 884. The basic story line is that Kainis, a Lapith woman, was raped by Poseidon, who then granted the victim's wish to be turned into a man, and added the gift of invulnerability from conventional weapons; however, in punishment by Zeus for his hubris, Kaineus was killed by centaurs who pounded him into the ground with branches and boulders (in the underworld he is supposed to have reverted to female). On the iconography of this hero, see *LIMC* 5, s.v., esp. comments on pp. 89091; the earliest representation (mid7th c.), a bronze relief band from Olympia, is no. 61, pl. 573; the South Italian skyphos is no. 52, pl. 572. Another famous occurrence is on the François Vase, no. 67 pl. 574. The story was popular in Athens for Black-Figure and Red-Figure vases (where it may appear in isolation, outside the wider context of a Kentauromachy), but it disappears from

their repertoire by the mid-5th c., when it begins to occur in architectural sculpture.

23. Yet Parthenon metope S 4 may reflect a "Kaineus' schema": the young Lapith has fallen (sunk?) to the ground, and is in a much more precarious position than the other combatants (except for the already dead man of S 28); the centaur who towers above him hoists a vase, ready to smash it on his victim, who feebly attempts to cover himself with his shield. The presence of protective armor looks incongruous at a banquet, where the fight is unexpected and weapons are impromptu. Yet the undoubted Kaineus on the Hephaisteion west frieze lifts his shield in almost the same pose, and the schema seems to develop into the Bassai pattern, where the shield is actually used as the surface on which the centaurs pound to make Kaineus sink underground: cf. Boardman 1985, fig. 90 no. 4 (Parthenon S metopes), figs. 113 slab 7 and 114.7 (Hephaisteion W frieze); and Boardman 1995, fig. 5.1 west (Bassai frieze). For the best photographs of metope S 4, see Brommer 1967,

8082 (with comparison to the first two figures of the Hephaisteion W frieze), pls. 17277. On the south metopes as a whole, see Berger 1986, 7898, with suggested identifications of individual centaurs on p. 79.

The quotation is from Osborne 1994, 6277 (on the Parthenon).

24. For the addition of new fragments to the central metopes, see, most recently, Mantis 1995 and (with excellent illustrations) 1997, who leaves their interpretation still uncertain, although becoming clearer. See also Trianti 1995 for additions to the other metopes. For one suggestion as a genealogical interlude the story of Ixion and Nephele as the origin of the centaurs and the ancestry of Peirithoos (but before the new discoveries), see Simon 1975. This flashback bracketed by scenes of fighting remains, however, surprising; we shall return to it in ch. 6. For a recent political interpretation of the Kentauromachy, see K. R.



Cavalier, "The Centauromachy-at-the-Feast on the Parthenon in Athens: An Allusion to Contemporary Politics?" Abstract, *AJA* 97 (1993) 310: all examples of the subject after the Battle of Tanagra in 458 B.C.E. are allusions to the treachery of the Thessalian cavalry. A spirited defense of the Parthenon Kentauromachy as allusion to the Persian attack (both being major examples of transgression) is given by Castriota 1992, 15265, although he unquestioningly accepts the myth of Ixion as the subject of the central panels. Brommer 1967 sees in the south metopes an Attic Kentauromachy, not the Thessalian story.

25. Note, however, that at Bassai, and probably also at Sounion, women were included. At the Temple of Apollo, the event has been recently explained as Peirithoos and Deidameia/Hippodameia traveling to a rural sanctuary in thanksgiving after the birth of their first child: Madigan 1992, 7883. For references to these monuments, see, e.g., *LIMC* 5, s.v. Kaineus: no. 54 (Hephaisteion frieze); no. 76 pl. 576 (RF column krater, ca. 470); no. 55 (Sounion frieze; cf. Boardman 1985, fig. 120 slab 3); no. 56 pl. 572 (Bassai frieze; cf. Boardman 1995, fig. 5.1, west). On the Amazonomachy at Bassai, see infra.

26. The eschatological suggestion is by Laufer in *LIMC* 5, s.v. Kaineus: see no. 57, ill. on p. 888 (Trysa; cf. Boardman 1995, fig. 222.8, in a context with women); no. 60 (sarcophagus from Limyra); no. 59 pl. 573 (Sidon sarcophagus; cf. Boardman 1995, fig. 226.2; note that the other short side is also decorated with two centaurs, albeit fighting over hunting prey); no. 58 (Mylasa frieze, ca. 100). MaussolleionKentauromachy frieze (at base of roof quadriga?): Ridgway 1997, 123, 129, with discussion of various possible meanings, including imitation of Herakles and Theseus, and allusions to Athens. Most of the monuments cited are in Greek style, or were even carved by Greek masters.

Note that at Trysa and on the Sidonian sarcophagus, the centaur to the left of Kaineus uses a large vessel as a weapon, thus resembling (in mirror image) Parthenon metope S 4 (*supra*, n. 23); this coincidence need not imply, however, that the Athenian relief depicts Kaineus. Although it retains a hint of the wedding feast and the ultimate cause of the brawl (the centaurs' drunkenness), the presence of this schema abroad may simply be due to the use of pattern books. At Trysa and on the Limyra lid, Kaineus has also been given long sleeves and lengthy chiton, as befits an Easterner.

For a recent suggestion that the Delphic Tholos is a Wind Sanctuary, rather than a heroön, see *supra*, ch. 3 n. 26 (Laroche 1992).

27. On Hellenistic Kentauroromachies in her general area, see Webb 1996, 35. Belevi Mausoleum coffers: see *supra*, ch. 3 and n. 6; note that *LIMC* 1, s.v. Amazones, no. 437, includes one of the Belevi coffers, mistakenly interpreting a kneeling Lapith as an Amazon. Ptolemaion at Limyra (Ptolemy II and Arsinoe II): *supra*, ch. 4 n. 51; Ridgway 1990, 196 pl. 95; Webb 1996, 12526, figs. 9899. Taras reliefs: Carter 1975, Cat. nos. 58, 97 (including Kaineus), 266 (pl. 46b). Thera metope: Hiller von Gaertringen 1904, 121 fig. 96. Ilion metope: *supra*, n. 16. Under the rubric of imitations we could include also the painted metopes of the Great Lefkadia Tomb (*supra*, ch. 4) that seem to reproduce those of the Parthenon. Andrew Stewart has commented in seminar that the two friezes, the Doric and the Ionic, taken together spell the *arete* of the tomb

owner: the Kentauroomachy signifies his control over his baser instincts (i.e., his self-control), the Persikomachy (or even the Amazonomachy, if that is what is depicted) displays his valor on the battlefield. I am hesitant about a multifigured myth like the Kentauroomachy symbolizing the virtue of a single man (as contrasted with the battle theme, where the deceased could be clearly identified), but I prefer this interpretation to that advanced by Petsas 1966, which equates the centaurs with the Persians, the metopes thus repeating, in allegorical form, the theme of the continuous frieze. Since the central metopes are damaged beyond recovery, we cannot tell whether the Kaineus episode was included, which would enhance the funerary context of the theme.

28. Hieron coffers at Samothrake (at least five centaurs interspersed with vine leaves): Lehmann et al. 1969, 11416, 23753 (for the relief with a vine leaf, see fig. 202 on p. 244); see also Mantis 19871990 (attributing to the coffers the relief body of a centaur now in Thasos), and the forthcoming publication of the paper on the Samothrake coffers that the Greek scholar delivered at the Hellenistic Congress in Athens, March 15, 1996. Teos frieze: Uz 1990; Webb 1996, 73. Roman sarcophagi and comparable representations: *IIMC* 3, s.v. Dionysos/Bacchus, nos. 18992, pl. 446; nos. 21116, pls. 44950. In these Roman works, the centaurs pull the god's chariot, thus indicating their subjection to him; perhaps this is again an allusion to the effect of wine on centaurs, as already implied in the Pholoe and the Thessalian Kentauromachies.

29. Amazons have also been the focus of gender studies, usually as exemplification of the male/female conflict and female victimization; see, however, M. Y. Goldberg, "The Amazon Myth and Gender Studies," Abstract, *AJA* 98 (1994) 33435, and her forthcoming monograph.

Blinkenberg Hastrup 1995 points out that the Amazon in Oriental costume, introduced during the mid6th c., is inspired by contemporary depictions of Skythians and simply stands for "barbarian" rather than for "Oriental." She therefore argues that the sharp distinction between the mythical and the historical sphere may be a modern construct. Dr. Webb points out to me that Greeks, especially Athenians, seem to have considered all women as physically and mentally different from men and thus, to some extent, barbaric and foreign. See now also Brown 1997, for a survey of the directions taken by modern studies on ancient women.

30. For reference to the ancient sources, with discussion, see *LIMC* 1, s.v. Amazones (P. Devambez), with commentary on pp. 63653; *LIMC* 1, s.v. Antiope II\* (A. KauffmannSamaras), pp. 85759; *LIMC* 5, s.v. Herakles\* (and the Amazon; J. Boardman), pp. 7173; *LIMC* 5, s.v. Hippolytos I; *LIMC* 7, s.v. Penthesileia (E. Berger), pp. 296305. I have asterisked the most informative entries with regard to the different versions of the legends. See now also *LIMC* 8, Suppl., pp. 51819, s.v. Amazonomachia, which provides cross-references to pertinent entries in previous volumes and brief commentary. Boardman 1982 gives a thorough discussion of ancient mentions, with the intent to determine when a specific version of the general story was established for instance, although Herakles' encounter with an Amazon goes back to the end of the 7th c., the specific task of obtaining her girdle may have been introduced much later, when the need for a

fuller cycle of labors was felt, or even to match Theseus'

deeds. Boardman, however, focuses on Athenian representations, including vase painting.

31. All references are to *LIMC I*, s.v. Amazones, which provide bibliographical information. Foce del Sele metope: no. 412; Topolia pediment: no. 414 (Ridgway 1993, fig. 7.123); Corinth terracotta pediment: no. 413 (Ridgway 1993, fig. 7.124); Apollonia frieze: no. 416; Selinous frieze: no. 415; Athenian Treasury at Delphi: nos. 9595a (battle metopes), no. 245 (pl. 472, Theseus and Amazon), no. 588 (Amazon akroteria; cf. Ridgway 1993, fig. 7.125). Metope no. 22 shows Herakles and the Amazon; the east pediment may have depicted Theseus kidnapping Antiope (Delivorrias 1974, 18182), but no assurance exists that the metopal battle is connected with the (tentative) subject of the gable. See also comments *supra*, ch. 3 ns. 3334. It may seem surprising that Amazons on a treasury could have a funerary connotation, yet the same has been suggested for the Karyatids of other Delphic treasuries.

Boardman 1982, 1415, prefers to see in the Athenian Treasury Amazonomachy an allusion to the Ionic raid of 499 (see *infra*, on Eretria), which probably inspired the story of the collaborative enterprise of Herakles and Theseus: each hero's deed with the Amazon on the long sides would have bracketed the Amazonomachy metopes of the east façade, thus providing additional meaning. Boardman is however scrupulous in pointing out the lack of topographical or mythological indications on the metopes. At his time of writing, the preferred date for the Athenian Treasury was still the 490s, whereas a date after Marathon is now considered more likely. Cf. Ridgway 1993, 345, for other possible metopal arrangements.

Amazons may also have appeared on the parapet of the Artemision at Ephesos: Ridgway 1993, 388 and n. 23 on pp. 407408; see now also Muss 1994, 112. An early tradition has the Amazons seeking asylum at Ephesos after being chased by Dionysos (or by Herakles and Theseus), and individual Amazons are said to have founded several Asia Minor cities, including Ephesos (Paus. 7.2.4). Their presence on the parapet would therefore be understandable in local terms.

Terracotta fragments from two late-Archaic pediments on Corfu (Kanoni) may also belong to Amazonomachies, but, to my knowledge, they are still unpublished except for a brief reference in the Museum guidebook: Ridgway 1993, 310 n. 7.8. One more terracotta Amazonomachy with Herakles, probably from a pediment, is listed by Toulopa 1983, 79, and dated ca. 530, but it is not included in *LIMC* 1.

32. Eretria pediments: for the Archaic, see *LIMC* 1, s.v. Antiope II, no. 2; Ridgway 1993, 300 and n. 7.46 on pp. 32435, gives bibliography for both the Archaic and the mid 5th-c. pediments, including the attempt (by D. Francis and M. Vickers) to lower the date of the first Eretria gable and the rebuttal (by J. Boardman). The theory of the allusion to the raid in 499 is by E. Touloupa; also Boardman 1982. Note that the 5th-c. sculptures, taken to Rome, were also used on a Temple to Apollo (Sosianus), although there the allusion was to Augustus' victories, and the Greek statues functioned as veritable *spolia* incorporated into the Roman structure: La Rocca 1986.

Karthaia akroterion: *LIMC* 1, s.v. Antiope II, no. 3; Ohnesorg 1994, esp. fig. 1.a-b (inscription), and Walter-Karydi 1994 (dating the inscription to the 4th c. and thus considering it a later addition). One more possible Archaic akroterion featuring an Amazon, in terracotta, comes from the Athenian Agora: cf. Ridgway 1993, 330 n. 7.58. Aigina W pediment (ca. 520510): Ridgway 1993, 29697 and n. 741 on p. 323, figs. 121a-b. The theory of Herakles and Telamon is by E. Walter-Karydi.

33. Athenian metope from South Slope: Despinis 1986; its stylistic date seems to be at the turn from the Archaic into the Severe. Parthenon west metopes: Brommer 1967, 19195; *LIMC* 1, s.v. Amazones, no. 417; cf. no. 246a-g, pls. 47273 for replicas of the Parthenos' shield. For two recent reconstructions of the Amazonomachy on the shield of the Parthenos, see, e.g., Mauruschat 1987 and Meyer 1987, with no background elements; I would prefer, however, Harrison's 1981 reconstruction, as executed (with slightly modified dimensions) by Alan LeQuire on his 1990 re-creation of the Pheidian image in Nashville, Tennessee. See also Ridgway 1981, 16467.

Boardman 1982, esp. 1628, discusses at length the Shield and other representations of the Amazonomachy in Athens, including the murals in the Theseion and the Stoa Poikile, that are however known only through literary sources. He points out that there is no evidence that the story of the raid on Athens by the Amazons was known before the 460s (p. 15), although it was probably inspired by the events of 490 or 480/79; he also stresses (p. 21) that the Amazons on the Shield "are barely oriental." A more recent discussion of these Attic monuments (Castriona 1992, 4358 and 1435 ) takes for granted that they depict the attack on Athens, both as allusion to the Persians and in correlation with the Parthenon west pediment. The latter, with its numerous female figures, would confirm the legend that the women's vote resulted in Athena's victory and eventually caused Kekrops' marital reforms and withdrawal of women's priv-

ileges, to appease Poseidon. On the Athenians' views of themselves and their manipulation of myth and history, Prof. A. A. Donohue refers me to, e.g., Hartog 1980, Tyrrell 1984, Hall 1989. See also Castriota 1992, 328.

34. On the invention of myth and tradition, see, e.g., Tudor 1972, and, albeit focused on more recent times, Hobsbawm and Ranger 1992, esp. 114, with an analysis of motivations and definitions. That the Athenians highly valued their bravery against the Amazons is however shown by the inclusion of the episode in all funerary orations for war casualties: see Boardman 1982, 6 and n. 15, who adds a reference to Herod. 9.27, and the expulsion of the Amazons from Athens as one of the arguments in support of the position the Athenians should occupy in the battle formation at Plataia.

Palagia 1993a has pointed out an important precedent for the Parthenos' Shield in some marble fragments from Sparta that can be reconstructed as a late-Archaic shield decorated on the interior with an unidentifiable subject, and on the exterior with an Amazonomachy. The heads of two helmeted Amazons survive, one inscribed

*Hιπ|ποφαμα*

in Lakonian characters; the Ionic form of the helmet and the disk earring, together with the label, leave no doubt as to the nature of the warriors. What I would doubt, however, is that the central figure is

an Athena, since the shield was held aloft by an over life-size statue of the very goddess (as Promachos or Palladion). Palagia suggests that the Rape of Antiope may have been the subject of that specific Amazonomachy, whereas that of Herakles seems to me more plausible, given Spartan claims to connection with that hero. Both the date and the location of this shield make it particularly significant, although we cannot count it as architectural sculpture.

Amazonomachy and Gigantomachy occur together on the following buildings: Delphi, Athenian Treasury (Gigantomachy postulated for pediment); Ephesos, Artemision (parapet); Selinous, Temple E (as individual metopes: Herakles and Amazon, Athena and Giant); Athens, Parthenon (E and W metopes; shield of the Parthenos); Athens, Nike Temple (E and W pediments, postulated on few remains); Argive Heraion, Temple of Hera z (metopes, pediment); Mazi, Athenaion (pediments; local Gigantomachy?); Priene, Athenaion (coffers). At Lagna, on the Hekateion friezes, the Gigantomachy is traditional, but the Amazons appear as allegory or personifications.

35. *LIMC* 1, s.v. Amazones: no. 97 (Olympia metope); no. 96 (Selinous metope); no. 99 (Hephaisteion metope). Nike temple W pediment: Despinis 1974; more recently, Ehrhardt 1989. A Trojan Amazonomachy has been suggested for one pediment of the Temple of Ares (cf. *LIMC* 1, s.v. Amazones, no. 418), but the attribution of the Penthesileia in Boston remains uncertain. Palagia 1986 assigns two fragmentary female figures to the W pediment of the Hephaisteion, but suggests an Amazonomachy connected with the Deeds of Herakles and Theseus, as a link with the metopes.

36. See, on this point, the comments by Boardman 1995, 30, and also p. 24 (about Bassai: "We are far from the political symbolism of Athenian Classical sculpture here, and the subjects must carry other messages. The Amazonomachy is perhaps the most difficult to explain except perhaps in terms of the general popularity of the theme."). Devambez (*LIMC* 1, s.v. *Amazones*) p. 646, mentions that in the 4th c. inspiration fades and academicism develops; for the specific monuments cited see: no. 101 (Bassai frieze, Temple of Apollo; Herakles' expedition; perhaps also Achilles and Penthesileia [Madigan 1992]); no. 419 (Argive Heraion, 2nd Hera Temple, metopes; unclear story but probably Troy because of Pausanias' mention); no. 421 (Epidauros, Temple of Asklepios, W pediment; Penthesileia in combat); no. 100 (Delphic Tholos, outer metopes; unclear story). The Mazi and Patras pediments are not included in the *LIMC*, but see Ridgway

1997, 3034 (neither action can be safely localized).

37. At the Tegean Athenaion, the east pediment showed the Kalydonian Boar Hunt, the west had the Battle of Achilles and Telephos at the Kaikos River; the metopes seem to have carried the story of Auge and Telephos. I have treated these issues in greater detail in Ridgway 1997, 4852.

38. The suggestion that the funerary meaning occurs first in Asia Minor is by Devambez, *LIMC* 1, s.v. Amazones, pp. 64647; the entry on Trysa is no. 420; other funerary examples cited, although not architectural, are the Kertsch vases, the stele of Parmeniskos from Apollonia (no. 439), and the Amazon Sarcophagus in Vienna (no. 435).

On the Trysa Heroon, see also Oberleitner 1990, and Ridgway 1997, 8894. One Amazonomachy appears on the upper register of the outer S(W) wall (left



of doorway); another is shown on both registers of the inner W wall, but not all commentators agree that it shows Achilles and Penthesileia. Other subjects are: the Deeds of Theseus (including the Kentauroomachy, as mentioned *supra*); the Killing of the Suitors by Odysseus; Bellerophon and the Chimaira; Perseus and Medousa, and several others.

39. *LIMC* 1, s.v. Amazones, no. 102 (Halikarnassos Amazonomachy); no. 441 (Priene coffers, erroneously called frieze). See also Ridgway 1997, 12023, 129, and 138 respectively, with extensive bibliography. Influence from the Parthenon and Athens at Halikarnassos was also suggested in light of the Kentauroomachy frieze on the same tomb, and of the coffers probably decorated with the Deeds of Theseus. Maussollos, moreover, had unified Lelegian cities under his rule (*Strabo* 13.1.59) as Theseus had promoted the synoikismos of the Attic denies; his tomb, in the center of the city, near the agora, had the traditional location of the burial of the founding hero, the *ktistes*. Tancke 1989, 1822, 22932 (Cat. nos. 3.110), sees traces of Amazons on the Maussolleion coffers, and would add the Deeds of Herakles to those of Theseus.

40. On Hellenistic Amazonomaichies in her general area, see Webb 1996, 35. LIMC 1, s.v. Amazones: no. 440 (Mylasa frieze; either from a funerary monument or an altar); no. 429 (Kallithea Monument; note that the entry includes slab Athens NM 3614, which is not pertinent, and represents our second example of an Amazonomachy on a funerary naiskos); nos. 103 (Tarentine predella, with Herakles), 42327, 43033 (all Tarentine, including three pediments and one frieze). Another listing, no. 438 (lime-stone frieze in Jurazzo, 3rd. c.) is also said to be funerary.

On the Kallithea Monument, for Nikeratos son of Polyidos Istrianos (from Istros on the Danube, not, as I mistakenly stated, from Istria), see also Ridgway 1990, 3133, with reference to the frieze in the Athens National Museum and the third example, from the Keraineikos. More extensive bibliography in Scholl 1995, 196 n. 74.

Carter 1975, according to my count, mentions 36 sure instances of Tarentine Amazonomachies (some comprising several figures), and 18 uncertain but possible examples. I mention here one uncertain example (Amazons against Skythians?) from Yubileynoe, in the Taman Peninsula, although it is unclear what structure this large frieze decorated: Ridgway 1990, 46, and a recent find of an additional fragment: *AJA* 97 (1993) 56263 fig. 30.

41. Sparta Amazonomachy: Mantis 1988, pl. 39 and line drawings in figs. 13. The panels show: (1) an Amazon and a male opponent with fluttering mantle, recalling Bassai; (2) two Amazons facing left in uncertain action; (3) an Amazon to right, running alongside a galloping horse; (4) an Amazon fighting to right. The 4th-c. date is suggested by Junker 993, 15960, pl. 29.2; the st c. by *LIMC* 1, s.v. *Amazones*, no. 443.

On the Archaic Athena with decorated shield, see supra, n. 34.

42. *LIMC* 1, s.v. Amazones: no. 104 (Magnesia frieze; see also Ridgway 1990, 15556 for chronological discussion); no. 436 (Teos frieze, ca. 300); no. 434 (Nikosia frieze, ca. 325300); no. 442 (Alabanda frieze; cf. Ridgway 1990, 15758; note the Amazonomachy on another temple to Apollo!); no. 797 (La-

gina frieze; cf. Webb 1996, 10815, figs. 8291  
). The commentary of the *LIMC* suggests that  
there is a gap in the Asia Minor sequence of  
representations during the 3rd2nd cs., yet  
Magnesia should fall within that span, and  
pelata shields, typically Amazonian, are de-  
picted at Miletos, as part of a weapon frieze:  
Webb 1996, 102 and n. 2.

43. For the comments on the Skythian axe I am indebted to H. Blinkenberg Hastrup. It should be admitted that the Greek opponents of the Amazons are equally varied in their equipment; they are however consistently on foot, whereas the Amazons are mostly on horseback. Moreno 1994, 25052, suggests that the Artemision is among the first figural complexes to commemorate the victory of the Pergamenes and the Romans over Antiochos the Great at Magnesia (that on the Sipylos, however, in 190189), but chronology may not support the claim. Herakles is preserved on the façade (W) side, as well as the N and S, suggesting that each stretch of frieze was to be read by itself. See however comments supra (ch. 3).

44. Earliest Attic Black-Figure representations from the Akropolis: Moore 1979, 99; cf. also *LIMC* 4, s.v. Gigantes (F. Vian and M. B. Moore), nos. 1041–23 for this group of Akropolis vases and their followers; on pp. 251 and 265, the topic is said to be first attested in the second quarter of the 6th c.

A gap in sculptural depictions during the 4th and 3rd cs. is postulated by the commentary to the *LIMC* entry, 25170, but it seems based on incomplete evidence or traditional chronology now revised. I shall list all known or presumed examples of the Gigantomachy in architectural sculpture, according to the sequence used in the *LIMC*, but inserting within brackets new finds or possible instances not mentioned there: no. 1 (Corfu, Artemision pediment, with other subjects; beg. 6th c.); [Foce del Sele, Treasury, ca. 560, single metopes]; no. 2 (Delphi, Siphnian Treasury N frieze, ca. 525); no. 3 (Delphi, Apollonion, W pediment, ca. 510?); nos. 45 (Delphi, anonymous treasuries, friezes, fragments of uncertain attribution, including Athenian Treasury, pediment? late 6th c.- after 490); no. 6 (Olympia, Megarian Treasury, pediment, ca. 510500; cf. Ridgway 1993, 299: local version?); no. 7 (Athens, Akropolis, Old Athena

Temple, pediment, ca. 525510); no. 8 (Athens, Akropolis, pedimental group? end 6th c.); no. 13 (Selinous, Temple F, metopes, 1st quarter 5th c.); [Ephesos, Artemision, parapet, 500-]; no. 14 (Selinous, Temple G, pediment? 1st quarter 5th c.); no. 15 (Selinous, Temple E, one metope, 460450 [Marconi]); no. 16 (Akragas, Olympieion, E pediment, after 480; cf. *supra*, n. 13); no. 17 (Sounion, Temple of Poseidon, frieze, 430? [now doubted]); no. 18 (Athens, Parthenon, E metopes, 447438); [Athens, Hephaisteion, E frieze? ca. 430420; other interpretations possible]; no. zo (Athens, Nike Temple, E pediment, ca. 425); no. 21 (Argive Heraion, 2nd Temple of Hera, E metopes or pediment, ca. 400); [Kalapodi, Artemis or Apollo Temple, metope? ca. 400; cf. Junker 1993, 178, pl. 35.3]; [Mazi, Athenaion, local (?) version, ca. 3901; no. 26 (Priene, Athenaion, coffers [listed out of chronological sequence in LIMC because dated ca. 158 or 3rd c.]); ca.

340); no. 22 (Ilion, Athenaion, metopes, beg. 3rd c.; cf. Webb 1996, 4751 ); no. 24 (Pergamon, "Altar" socle frieze, " ist half 2nd c."); no. 25 (Pergamon, Propylon to Athenaion [but cf. supra, ch. 2 n. 44); no. 28 (Lagina, Hekateion, W frieze, end 1st c.); no. 29 (Termessos, Temple of Zeus

Solymeus, "chronologically close to Lagina"); no. 49 (terracotta frieze from S. Italy; "Hellenistic?").

Various articles in Neils 1992 discuss sources, connections with the Panathenaia, and other relevant information; on the peplos, Barber 1992; for Aristotle, see fr. 637 (V. Rose ed.), and other references (esp. to Ferrari/Pinney, who identifies the *aition*) in Ridgway 1992. The Giants' attack on Olympos equivalent to Persians' attack on Akropolis, as a "surrogate Olympos": Castriota 1992, 13851, esp. 141.

45. For the interpretation of N 3032, see Simon 1975, 10911. Reservations on the traditional understanding of the Parthenon Ilioupersis: Ridgway 1981, 1819, with further discussion and citation of others' opinion in ns. 9 11. Castriota 1992, 16574, shares my qualms, but attempts to solve the issue by pointing out that the extant panels do not carry negative connotations, and therefore postulating that the traditional ferocious deeds by the Greeks would not have been included in the series. He strengthens his argument by noting that Polygnotos' painting in the Knidian Lesche at Delphi was said to show the aftermath, not the actual burning of Ilion (cf. his pp. 96109 for references). It is perhaps significant that Euripides, in some of his later plays (e.g., *Troades*), seems to reverse the (by then) traditional position about the "lawless barbarian" and the ethical Greek, in an apology of Trojan behavior: Hall 1989, 21123. Cf. also her statement on earlier Greek beliefs about the Trojans,

and the list of Achaian crimes at the time of the fall of Troy, in the *Ilioupersis* (pp. 3435).

Paris in Oriental costume: e.g., Aphaia Temple, Aigina, W pediment, *LIMC* 1, s.v. Alexandros, no. 75 pl. 392. Aithra and Theseus' sons: *LIMC* 1, s.v. Aithra 1; no. 75 is Parthenon metope N 23 as a possible depiction of the episode of her rescue; cf. Dörig 1982, esp. 19699 on the role of Athena in the Trojan war.

On the Fall of Troy in general, see now *LIMC* 8, Suppl., s.v. Ilioupersis, pp. 65057, with the comment (p. 657) that "it is not clear to what extent it reflected contemporary or recent east-west antagonism," when the subject appeared in architectural sculpture of the second half of the 5th and the early 4th c. The Parthenon north metopes are no. 27, fig. on p. 654.

46. Athens, Old Athena Temple, and Delphi, Alkmeonid pediment: see discussion and references in Ridgway 1993, 29196; add Childs 1993 (Delphi) and 1994 (Athens); Rhodes 1995, 5253 and ns.1013 (Athens, as part of his theory of processional planning on the Akropolis). For a new proposal for the arrangement of the pedimental sculptures, see, most recently, J. R. Marszal, "The Sculptural Program of the Old Athena Temple at Athens," Abstract, *AJA* 101 (1997) 346. The main proponent of the equation Herakles = Peisistratos is Boardman 1972 and 1975. On Peisistratos and allies as the Giants on the Siphnian Treasury frieze (with comments on the Athenian Treasury), see Watrous 1982.

Barbanera 1996 attempts to explain even the Sicilian Gigantomachies (to which he would add an Akragan pediment, on a temple preceding the Olympieion, and one at Himera, on the so-called Temple of Victory [Athenaion], although both sculptural attributions are uncertain and, to my mind, doubtful) as allusion to intra-city or inter-cities politics, without xenophobic meaning. Thus he views all Gigantomachies as neither reference to the Carthaginians in

Sicily nor to the Persians in Greece. Athena killing a Giant appears also, as mentioned, on a metope from Selinous, Temple E, but as part of a series of disparate episodes, whatever meaning should be given to the entire program.

On Hellenistic Gigantomachies in her general area, see Webb 1996, 34.

47. See *LIMC* 6, s.v. Leda (L. Kahil), 231, and no. 5, Leda in Boston, ca. 410400. Note that the story of Leda and the egg had an earlier iconography, which implies that a bird of some sort must have been part of the episode. A new interpretation of the Parthenon frieze was suggested to Connelly 1996 by the fairly recent recovery of a fragment of Euripides' *Erechtheus*.

48. This point will be brought up again in ch. 6, while considering who was responsible for establishing such programs. For this understanding of the temple image and its decoration, see, e.g., Tersini 1987, esp. 158.

49. This seems to me one of the primary reasons for the Gigantomachy on the Pergamon Altar-note, for instance, the Athena being crowned by Nike that imitates the distinctive imagery of Parthenon E metope 4. Yet Knell 1990 (pp. 17089, esp. 18485) still considers the subject allusive of the constant threat to the Greek world represented by barbarian forces, which for him would include the Romans. Such threat can be fought only with the help of all gods and demi-gods. See, however, A. Shapiro's review of Knell 1990: *Gnomon* 1993, 64446. If the victories commemorated by the Pergamon Gigantomachy included also those over the Seleukids and the Macedonians, as often postulated, these barbaric (i.e., non-Greek) connotations can hardly be credited.

50. For the position on the infinite expansion of meaning accruing to a text, see Bal and Bryson 1991, especially 177 and 179, with reference to works of art. Note also the emphasis of several of the papers presented at the Joint AIA/APA Colloquium "*A City of Images*: Some Views 12 Years Later," in December 1995 (Abstracts published in *AJA* 100 [1996] 35961), especially that by R. F. Sutton, Jr., although focused on vase painting.

On the relative reliability of local guides, see, e.g., Paus. 2.23.6; cf. Pliny *NH* 2.45.117: "Nowadays a person may learn some facts about his own region from the notebooks of people who have never been there more truly than from the knowledge of the natives."

## Chapter 6

Who:

Architect, Sculptor, Patron

At the end of the previous chapter, we raised the issue of changing sculptural messages, and, more precisely, of our difficulty in understanding original meanings in Greek architectural programs given our great remove from the times of their execution and the baggage of our own accumulated experience, which inevitably conditions us to read them in the light of our own prejudices. We start, moreover, from the unprovable premise that each ancient iconographic program had a primary and clearly intelligible content, or, at the very least, that each pediment, metopal series, or frieze depicted a well-defined myth or event easily understandable by all viewers at its basic level. This may not be so.

Even leaving aside for the moment the impasse represented by the fragmentary state of many monuments, we still have to acknowledge that also more or less complete depictions can escape our comprehension witness the different interpretations and the continuing debate over the fully preserved east frieze of the Hephaisteion, the almost entirely extant friezes of the Nike Temple, the surviving slabs of the Ilissos Temple frieze, and, primary among these, the Parthenon frieze itself, of which not only the complete west side remains in situ, but also most of the extent of the other three is known through both actual reliefs and early drawings. Note, moreover, that all the examples I have cited belong to one of the most literate and best documented cities of antiquity, at the peak of its power and glory. As John Boardman ( 1995, p. 30) has noted, "In the fifth century the subject matter of the architectural sculp-

ture of the great new buildings of Athens proves a tantalizing challenge to those who wish, correctly, to determine what their message might have been." And he adds: "An impression that the fourth century was less subtle may simply reflect our ignorance or lack of imagination, but for the most part the record seems to offer fewer challenges."

To be sure, artistic (or even literary) master-pieces owe much of their appeal to their polysemy to the quality of meaning different things to different people in an endless kaleidoscope of patterns. We cannot, moreover, exclude the possibility that some intentional ambiguity was built into such Athenian representations. The phenomenon is certainly attested for later periods, and willful obscurity has recently been claimed for as well-known a work of art as Michelangelo's program for the Medici Chapel, interpreted on the strength of contemporary Neoplatonic philosophy.<sup>1</sup> It is therefore legitimate to ask, in the case of fifth-century Athens, what might have determined this state of affairs. Was it the intellectual climate of the city, which reflected the input of philosophers and playwrights in her sculptural programs? Was it her political situation that promoted myth-making and the manipulation of extant legend for propagandistic purposes? Was it the influence of exceptional

personalities, such as Perikles and Pheidias? The issue should be approached on broader terms, however, to encompass the entire field of sculpture and architecture in their planning stages: who was responsible for the selection of orders and personnel, choice of topics, and final decisions—the members of the building commission, the architect, the sculptor, or the patron?

The answer to this question can be either very long or very brief. I could in all honesty state that, after looking at the evidence available, I was unable to reach firm conclusions—we simply do not know enough to tell. But I prefer to take the long road, in an attempt to review promising clues, or at least the scholarly debate that has arisen around them. I shall do so by examining each protagonist in turn, but with the warning that arguments will inevitably overlap, as our fluid evidence—or at least its interpretation—cannot be easily divided into water-tight compartments.

We should also keep in mind throughout that the very notion of "work" as we define it, whether intellectual or physical, whether performed by menial workers or by conceptual planners, did not exist in antiquity. For the Greeks, only the various activities, the *technai*, existed, as carried out by the different *technitai* or artisans (a category so vast that it could include theatrical actors), without that basic distinc-

tion that we make between the masters and the workmen, or even between the major and the minor arts. The Greeks tended to think in concrete terms, and abstract concepts such as "sculpture" and "architecture" had little validity for them except through the objective products of the persons who carved sculptures and erected buildings. As has often been noted, no Muse presided over those that we call the visual arts; divine inspiration was admitted only for the intellectual pursuits, as befit the daughters of Memory. Along the same lines, it is important to remember that the "discovery" of the artist as a distinct and distinctive personality did not occur until the fifteenth century, in an Italy dominated by powerful patrons and idiosyncratic masters. 2

## The Process

Except for times and areas of tyrannical or monarchical regime, the process of construction seems to have been a relatively democratic activity: a proposal was made to, and passed by, a governing board; funds were raised within the city itself or, in the case of national and international sanctuaries, from outside sources; a commission to supervise the works was established, often as well as one to administer finances; and detailed contracts were issued to various practitioners to supply specific services and materials, with proper guarantors where necessary.<sup>3</sup> The entire procedure was a public affair, with revenues and expenditures often inscribed on stone slabs for open display and review. As Burford puts it, "it is a pretty certain conjecture that ninety percent of the bystanders on any building site felt themselves competent to pass judgment on the work in progress" a situation not very different from today's practices, when protective

fences around a construction area provide "spy-holes" for pedestrian inspection.

Within this general framework, it is obvious that specific decisions were made by fewer people than the (sometimes yearly) members of the building commission and the finance board, although in sanctuaries the priestly body may have exercised considerable control. From our specific point of view, we should focus on the persons responsible for deciding whether or not to use architectural sculpture, of what kind, and with what content. As we have often stated in the course of these chapters, buildings, being such a public and permanent expression of a polis or a sanctuary, were carefully articulated in terms of location (usually determined by religious tradition or civic importance), architectural orders to be used (for practical, as well as political/ethnic reasons), and vi-

sual message. Each structure functioned as a virtual billboard that could not be randomly filled.

In concrete terms, some sculptural decisions would have had to be made at a relatively early stage of temple planning, since architectural ornaments might require special provisions.

*Columnae caelatae* would demand some larger drums to carry the reliefs, and decorated pedestals, as at Ephesos (cf. ill. 4), had to be placed—whether already sculptured or not—under the columns before these were erected. Carved metopes were usually set between the triglyphs when the frieze course was built or, if slipped into prepared slots from above, before the horizontal cornice was in place; their frequently high relief would have prevented sculpting in situ. Even when carving could be carried out in the final stages of construction, specific arrangements had to be made beforehand, such as those for the continuous friezes over the Hephaisteion porches. In the case of large temples, the inclusion of pedimental compositions could require special strengthening of the horizontal cornice to

support the weight, as was done in fact in the Parthenon, not only through the cutting of beddings for iron bars under the central figures, but also through the cantilevering of the bars themselves by means of the tympanum blocks.<sup>4</sup> These types of decisions would appear to be the primary jurisdiction of the architect.

## The Architect

As Burford states, our understanding of the term (in Greek, literally, the "chief builder") has "unnecessarily" complicated the question of the Greek architect's status in his trade.<sup>5</sup> Two major schools of thought are current: one sees architects as persons of means and education, who had life activities discrete from their architectural function and performed the latter virtually as a form of liturgy (in the Greek sense of the term), for the benefit of the polis; the other views them as master builders who rose from the ranks of the masons and became knowledgeable through apprenticeship and practice.<sup>6</sup> As is often the case, the truth may lie somewhere in between these two extremes, and, once again, it is reasonably sure that the passing of time brought about differences in the training and status of the architects.

The most obvious change might have occurred during the Hellenistic and Roman periods, when rulers and emperors provided sufficient continuous work for an architect to justify considering him a professional rather than an amateur, although perhaps never as erudite a person as

advocated by Vitruvius in his *De Architectura* (1.1.11). On the other hand, Vitruvius, on his own testimony, may have consulted over sixty treatises in compiling his own work. He lists many architects, some as early as the sixth century B.C.E., who wrote books on their theories, and he complains that some could have written and did not. Contrasted with sculptors, of whom only three or four are known to have produced commentaries *on their own art*, architects would seem to have been the more literate, better educated class.<sup>7</sup> Yet even this notion is conditioned by the vagaries of preservation and the relative reliability of our extant (mostly late) sources.

The most important contemporary information about architectural techniques and their practitioners (besides the monuments themselves) comes from Greek building accounts, which have survived in a variety of forms—the transcription of a public building proposal as approved by a governing body, detailed specifications to contractors, and general yearly statements of income and expense in connection with particular projects. Among the best known are the inscriptions describing the making of the various structures in the Sanctuary of Asklepios at Epidauros and the accounts for the fourth-century Temple of Apollo at Delphi. Important epigraphic information exists also for the Parthenon and for several other monuments in diverse locations. These have been mined for all possible clues about the role of the architect, especially as inferable from remuneration, but the same text has often led to entirely opposite conclusions, some scholars emphasizing the monetary value of specialized

training and creative tasks, others viewing architects' and sculptors' salaries as part of the same general financial picture, without preferential rewards.<sup>8</sup>

In budgetary terms, an architect deciding to use architectural sculpture had to consider not only the payments to individual sculptors, but also those to quarrymen and wagoners, which could add up considerably, and might be vetoed by his supervising board.<sup>9</sup> Yet it may be difficult for us to separate the purely technical costs from the more "artistic" ones involved in the actual carving of specific features, since often contracts with sculptors were global, expecting the individual masters to provide the necessary materials. It is generally assumed that architectural sculpture was among the costliest features in a building project; yet even this notion may be valid only for those sites that required special effort for the transport of statuary stone, given their own lofty location and their distance from suitable quarries. The fourth-century Apollonion at Delphi is a case in point. Although none has survived, there

were probably carved metopes over both porches, since building contracts with the sculptor specify 1,000 Attic drachmas per panel thus a total cost of two talents for both friezes. The twenty-four pedimental statues cost approximately 5,000 Attic drachmas per figure. For the Parthenon pediments, a sum of 16,392 Att. drs. (approximately 2.7 talents) was paid in the single year 434/3, although we do not know how many carvers were included in the payment. It is moreover difficult, in these cases, to compute the percentage of the cost of the architectural sculpture versus that of the total temple.<sup>10</sup> I have, however, attempted a highly approximate calculation based on the Epidaurian building accounts for the Asklepieion, and was surprised to find that, in that instance, architectural embellishment, even when taken in a broad sense, may have cost approximately one seventh of the total expenditure for the temple.

Specifically, under architectural ornamentation, I included the painting of the akanthos decoration, the making of the masks for the coffers (probably also in paint), the gilding of rosettes, stars, and moldings, and the carving of the lion-head spouts for the sima, although the total figure cited for this last item (563 drs.) includes the cleaning of the temple. I am sure I omitted entries that could count as architectural sculpture according to our definition, such as the carving of the interior Corinthian capitals (?) since they do not appear in the accounts as preserved. But I deliberately overlooked the entry for the debated *typoi* that I consider reliefs for the statue base, as recently suggested, rather than models for architectural features, for which the accounts consistently use the term *paradeigmata*.<sup>11</sup>

The Epidaurian Asklepieion, although relatively small, was a luxurious structure. It was one of the first to use *prosopa* (masks?) for its coffers; it employed black and white stone for its paving, elm wood, ivory and probably gold nails for its door, metal snakes for the lid of its treasury-box, and gilding for various features. Beyond the temple costs, 50 talents were spent remorselessly one imagines for the chryselephantine statue of Asklepios within the temple. Yet its outside sculpture (cf. ill. 19) was limited to two pediments (with under life-size figures) and six fairly complex akroteria its metopes were left blank and the opisthodomos was omitted. Were these decisions based on financial considerations, or were they part of that trend toward interior elaboration that seems to begin with Bassai?

Were our figures reliable, it would be significant to compare the percentage of temples with sculptural embellishment against those



without. A chart of Doric peripteral temples drawn by Knell shows that, on the Greek Mainland during the fourth century, fourteen structures (one doubtful) carried no architectural sculpture, as against six (one doubtful) that did. Here architectural sculpture is intended in its traditional sense of carved pediments and metopes; akroteria, which could be quite complex and meaningful, are not included, nor are what we might call "floating sculptures" statuary that is certainly to be considered architectural but cannot be assigned to any structure with confidence. Yet despite all possible reservations, the comparison seems striking. 12 Proportions of decorated versus undecorated buildings may be even higher for earlier periods, when regional preferences prevailed: sculptured pediments in Attika and the Mainland in general, carved metopes primarily in Magna Graecia, continuous friezes most at home in Asia Minor.

One of the decorated temples included by Knell may be significant: the Athenaion at Mazi (ancient Makistos) which, on architectural grounds, seems to have been built during the first half of the fifth century, although its pedimental sculpture is undoubtedly later, probably around 380. A plausible suggestion is that the further embellishment of the previously empty gables might have been made after 399, when the Triphylian cities, including Makistos, became independent.<sup>13</sup> Since the subject of one gable seems to be an Amazonomachy, and of the other a (possibly local) Gigantomachy, Athenian input has been postulated, but an equally possible source of inspiration is the geographically closer Argive Heraion, perhaps more religiously influential for Peloponnesian towns. Whatever the source of inspiration, the case shows that some architectural sculpture need not be contemporary with its structure therefore, not always an architectural decision and

might be added when financial or political conditions (or even fashion trends) allow it.

Yet the decision to use sculptural embellishment on a building, and of what kind, may have been determined by factors other than sufficient finances and/or the availability of competent carvers tradition and intentional imitation may have played a large role that seems both to diminish and enhance the architect's contribution.

Tradition first. In the case of the already mentioned Apollonion at Delphi, not only were the plan and general layout conditioned by those of its sixthcentury predecessor, but, in my opinion, so was the adoption of sculptured pediments (and metopes), at a time when fewer Doric temples were so embellished. The fourthcentury architect, to be sure, altered proportions and the capitals' profile, but in general must have

felt bound by the dictates of tradition. The same can be stated for the Classical Apollonion at Bassai, whose plan had been considered highly original but is now seen to have reflected that of the Archaic structure even to the inclusion of the peculiar north-south orientation with eastern door, interior supports with engaged columns, and "adyton."<sup>14</sup> The Parthenon had many features in common with the Older Parthenon (ill. 39), and even the Erechtheion, perhaps the most idiosyncratic of Greek religious structures, can be partly explained through the layout of the Old Athena Temple. Time after time, location and plan of a sacred building, and, when known, its type of architectural sculpture, are found to remain approximately the same through the ages.

Deliberate imitation, on the other hand, implies an architectural choice made with relative freedom from tradition, although based on outside influence. Such influence may be determinant in more ways than one: not only can it suggest the subjects of the architectural sculpture, as we have hinted above, but also it can promote the use of specific materials (e.g., dark stone) and affect the temple plan itself. It is now obvious that buildings could "quote" previous structures, both in specific features such as moldings, bases, and capitals, and in entire layouts. The phenomenon is well known in literature and in the visual arts (vase painting, sculpture), but it deserves further study in the context of architecture. Here I need only recall the recurrent use of 6x15 peristyles for temples of Apollo (e.g., at Corinth, Delphi, Bassai), the frequent imitation of fifth-century Athenian buildings at Sounion, Delos, Epidauros, Xanthos, Limyra, and other areas. Some motifs and moldings may result from ex-

perimentation within contemporary architectural circles, if not exactly from the same workshop tradition; yet some are sufficiently removed in time and space to suggest deliberate quotation on the part of the architect.<sup>15</sup>

So far, therefore, I have painted an ambivalent picture: an architect who was learned enough to "quote," yet also limited by tradition and financial considerations; a person competent to supervise others, but in turn subject to supervising boards. It is worth recalling, in this context, that originality was not an ancient goal or even asset (although making buildings bigger and more impressive than their predecessors may have been), and that few architects would have had the luxury of extensive experimentation. A few well-known facts may also be profitably repeated.

(1) Some projects involved such enormous structures that no single architect could see them accomplished during his lifetime. We can immediately think of the Temple of Artemis at Ephesus, both the Archaic



(cf. ill. 4) and the late Classical structures, which included a considerable amount of sculpture. We are given architects' names for these phases (Vitr. 7. praef. 12, 16): Chersiphron and his son Metagenes of Knossos, in consultation with Theodoros of Samos because of his expertise in dealing with marshy ground (Diog. Laert. 2.103), for the sixth-century building; Demetrios, the slave (*servus*) of Artemis, and Paionios of Miletos for the fourth-century one. Pliny (*NH* 36.95) mentions 200 years of construction, and although he obviously conflates the earlier with the later building, there is no doubt that each temple took a long time to erect. Even more obvious is the case of the Hellenistic Didymaion (cf. figs. 4-5, 8-9), allegedly by the same Paionios and Daphnis of Ephesos (Vitr. loc. cit.), which not only remained unfinished, but which clearly shows, through the various architectural drawings engraved on the courtyard wall, that modifications in design occurred throughout the span of activ-

ity, beginning almost immediately after the inception of work, down to the Imperial period. Even the smaller Temple of Athena at Priene, although connected with Pytheos who wrote a treatise about it (Vitr. 1.1.12; cf. 4.3.1), seems to have been "in progress" from the mid-fourth century to Augustan times. Other Hellenistic sacred buildings may have had similar fate.<sup>16</sup>

(2) Some projects on a smaller scale underwent interruptions which probably required resumption of work under different supervisors. Here the typical example is the Erechtheion, for which the latest theory assumes an inception in the mid to late 430s, an interruption during the plague and the Peloponnesian War, with a documented resumption in 409/8 until 406/5. A controversial suggestion would want to see the Parthenon begun by Iktinos and Karpion (who are mentioned as coauthors of a book on the subject [Vitr. 7. praef. 12]), and finished by Kallikrates, who however left no writings and was therefore, in Roman times, erroneously viewed as a collaborator of the architects for the earlier phase.<sup>17</sup>

(3) Some projects, even if not colossal in scope, underwent design modifications while in course of construction. This evidence, to be sure, can be interpreted in two ways: the initial architect may have been replaced by another, who introduced the changes; or the initial architect himself may have altered his original plan, either from a desire for experimentation or because of outside pressure. Among the examples, one can cite the Temple of Zeus at Olympia (cf. ill. z6), whose Doric capitals, presumably under Libon's supervision, present notable differences in the curvature of the echinos from one side to another; and the

Parthenon, whose modifications in porch planning are however variously explained from a decision not to use left-over drums from the Older Parthenon for the east prostyle columns, which were made slenderer with a consequent shift of their stylobate, to influence from Perikles who required a continuous Ionic frieze over the porches in place of the originally projected Doric metopes (cf. ill. 28).<sup>18</sup> The entire interior arrangement of this temple, moreover, is usually attributed to Pheidias' desire to set off his statue, rather than to Iktinos' originality. This last supposition brings us to a discussion on the role of the sculptor.

## The Sculptor

A few masters, to be sure, were both sculptors and architects: Skopas was said by Pausanias (8.45.4-7) to have built the fourth-century Temple of Athena Alea at Tegea, and Pytheos, who was the architect of the Priene Athenaion and seems to have written both on that temple and on the Maussolleion, was also the maker of the great marble quadriga that topped the latter (Vitr. 7. praef. 12; Pliny *NH* 36.31). The other sculptors associated with the Halikarnassian tomb Skopas, Timotheos, Leochares, and Bryaxis acquired such reputations (in both ancient and modern times) that Pytheos has not been credited, to my knowledge, with the responsibility for the entire project; yet it is usually taken for granted that Skopas was at least the mastermind behind the pediments of the Arkadian Athenaion. In other cases, a single sculptor is considered the designer, if not the sole carver, of a total sculptural program for instance, Timotheos at the Epidaurian Asklepieion, although his role is pos-

tulated on the erroneous translation of *typoi* as "models." The most consequential and widespread theory is however that Pheidias was the dominant force behind the whole planning of the Parthenon. All these views are controversial, but we shall here concentrate on the last one.<sup>19</sup>

To be sure, our assumption is based on ancient authority. Plutarch states that Pheidias was the *episkopos*, the overseer, of all projects because of his friendship with Perikles, and that his great influence brought the sculptor much envy and enmity, with consequent slander and accusations. One of them that Pheidias placed his own portrait on the Athena's shield has been exposed as a later anecdote, and Plutarch's writings, both the *Parallel Lives* in general and his account of Perikles' times specifically, are now considered historically unreliable. In addition, it is obvious that the Greek writer, who lived ca. 46-120

C.E., has adopted the mentality of a Roman subject who is used to the extensive control exercised in his time by the emperor and the authority of the court masters. Many scholars, moreover, have pointed out that the term "episkopos" is never found in extant building inscriptions; even if Pheidias had been a member of the supervising commissionan unlikely supposition, especially since its members changed yearlyhis title should have been *epistates*. Yet we cling to this available ancient source and we so admire the Parthenon program that we want to see the mind, if not the hand, of a man of genius behind it all. 20

In broad terms, the two positions for and against Pheidian control can be summarized as follows. Those who doubt an all-pervasive Pheidian influence point out that the sculptor's name is never mentioned in connection with anything but the making of the Athena Parthenos. Indeed, Plutarch himself stresses all the other "great architects and artists employed on the works" in describing what can be considered the entire Perikleian building program. Yet the names he gives are solely those of *architects*: Kallikrates and Iktinos for the Parthenon; Koroibos for the Eleusinian Telesterion, completed by Metagenes and Xenokles after Koroibos' death; Kallikrates again for the Long Walls; Mnesikles for the Propylaia; and he adds a description of the Odeion without mentioning its maker. Nothing is said about sculptural embellishment, thus prompting even a scholar in favor of Pheidian control (Borbein 1989, 101) to admit that "in the process of erecting a temple, architectural sculpture can-

not have played the leading role that we often ascribe to it." Wesenberg, who is in the opposite camp, finds that all Athenian architectural sculpture of the fifth century has a collective aspect quite different from the focus on the makers of free-standing images reflected by the ancient sources. Although sketches might have been made available to the actual carvers, both for the Parthenon and for other Athenian buildings, these were competent masters who could exercise a certain degree of independence in their execution and stylistic expression.<sup>21</sup>

Another point in favor of this last theory is the apparent diversity not only in style but also in composition among the Parthenon sculptures, which cannot be ascribed solely to the different hands who executed them and must therefore bespeak different models hence not a single planner. Thus Himmelmann (1988) has suggested that the southern one-third of the east frieze was made in free imitation of the northern two-thirds; that the entire east frieze is compositionally quite different from the west (and not purely because of subject matter); that the south

frieze is a loose but more developed replica of the north, thus implying a later plan; that the west pediment does not have the cohesive character of the east one; that the north metopes, with their partly interconnected (across-the-triglyph), partly episodic (single-panel) narrative, must have required stricter guidelines than the west metopes; and that the central metopes of the south side contrast significantly with the framing Kentauroomachy duels.<sup>22</sup> This last example has been subjected to such different interpretations that it is best at present to leave it aside. One more argument can however be mentioned.

Both ancient sources and archaeological evidence tell us that Pheidias (whether or not he was brought to trial, and for what causes) left Athens no later than the mid-430s to work on the chryselephantine Zeus at Olympia: the finds from his workshop at the panhellenic sanctuary provide sound testimony. He was therefore away at the time when the pedimental sculptures were carved. Considering the length of time he must have spent in making the Athena Parthenos (apparently completed in 438) and the almost contemporary Athena Promachos (not to mention the Marathon dedication at Delphi), he would have had relatively little leisure to prepare actual models for the entire sculptural program of the temple, and especially to influence Iktinos on the fine points of the Parthenon plan to fit his grandiose conception.

Those who support Pheidias' major role counter these arguments in various ways. A primary consideration is the fact that no other temple before the Parthenon had used an interior colonnade to form a dramatic backdrop for the cult image. The entire layout of the building provides for a wider cella, and thus extra space, for the all-around viewing of the chryselephantine Parthenos; hence the Parthenon architects must have reached their solutions after discussing the statue with its maker, undoubtedly Pheidias. Additional, and strong, evidence is found in the thematic and symbolic connections between the Athena and the architectural sculptures, suggesting a single mind behind the formulation of the iconographic program. In particular, the continuous and "historical" Ionic frieze "a foreign body in a Doric temple" contributes to the global exaltation of Athens' power implied in the other, mythological topics. Such a high degree of correlation seems impossible without coordinated plan-

ningthus Pheidias (the only sculptor named by the sources) was the coordinator of the entire enterprise.<sup>23</sup>

One more argument advanced by Borbein (1989) seems to me less valid: that stylistic and compositional differences occur in the architectural embellishment of many earlier buildings (the friezes of the Siph-



nian Treasury, the metopes of the Athenian Treasury, those of Temple E at Selinous, and even the sculptures of the Zeus Temple at Olympia), and should therefore not surprise in the Parthenon. I would agree that stylistic evolution (hence differences) can be expected on the strength of the intensive pace of sculptural production demanded by the making of a building, and equivalent to the experimentation we see in architecture. Yet no single "mastermind" is named by the sources for the other structures cited, which therefore might have had several "planners" as well as carvers, and cannot be considered comparable cases. In Archaic times, sculptural programs seem to have been more loosely worked out: witness the fact that no single or obvious theme can be postulated for Selinous Temple C, the so-called Treasury at Foce del Sele (cf. ill. 32), or the Athenaion at Assos (cf. ill. 11). Even the "program" of Temple E at Selinous (cf. ill. 27) has been variously ex-

plained, the most recent theory presenting it as "narration by association," in an almost biographical linking of clues. It may well be that the concept of thematic unity is a modern construct without strict ancient validity. 24

The Temple of Zeus at Olympia (cf. ill. 26) is, in my opinion, much more stylistically coherent than the other examples; its pedimental figures may indeed have been copied from three-dimensional models, as suggested by measuring points on them. It seems unlikely to me that groups as large (therefore heavy) and as complex as some of those for the Parthenon gables could have been executed from drawings alone, without models in the round at reduced scale. Pheidias' impact even on a pre-existing temple has been sought in the architectural adjustments made to the Olympia cella for displaying his chryselephantine Zeus, and in the Athenian elements included in the god's decoration,<sup>25</sup> but even this evidence could be debated. At this point, I should express my own views, openly stating that I stand closer to the doubters than to the believers.

There is no question that a remarkable correlation exists between the Athena Parthenos and its "envelope." As already mentioned, Kentauro-machy, Amazonomachy, Gigantomachy are themes that appear on both the statue and the carved metopes; in addition, the Nike on Athena's hand seems about to crown the goddess, just as the Victory on East metope 4 does, although in the midst of the fight. If the east frieze shows all the gods gathered to celebrate their triumph over the Giants, as the *action* of the Panathenaic festival, the connection among metopes, frieze, and statue would be even closer.<sup>26</sup> Yet some problems exist.

The first, and most important, is that we do not fully understand the



Parthenon program, except perhaps in the most general terms. If the frieze represents the Panthenaic procession, as generally believed, its discrepancies with what is known about the religious festival are almost more numerous than the correspondences, thus forcing commentators to postulate symbolic groupings or specific circumstances to account for the anomalies. Wesenberg (1995) goes so far as to suggest allusion to *several* festivals occurring at different times. A recent proposal that offers a mythologico-heroic (as against a quasi-historical, ritual) interpretation, and would solve many puzzling features, has so far met with some skepticism. The message of the central South metopes is still undeciphered; Wesenberg (1983) argues, on technical and compositional grounds, that the "intrusive" panels were an afterthought, added to complete a shorter series meant for the pronaos (Doric) frieze and therefore not planned from the beginning. Others have suggested that the Battle against the Cen-

taurs was executed for a predecessor to the present Parthenon. I agree with neither of these theories, and shall return to this problem below; here suffice it to state that these different interpretations are symptomatic of our difficulties with the message.<sup>27</sup>

The specific Amazonomachy on the Parthenos' shield—the attack on Athens, perhaps only recently devised because of its originality, may bespeak the concept of a man of genius. By contrast, the Amazonomachy on the west metopes seems almost intentionally generic (at least, in its present damaged state), and as conventional as possible. All other epic and mythological stories illustrated on the cult image and the metopes belong to a well-established repertoire of the visual arts, with numerous precedents and parallels. Indeed, the Ilioupersis of the north side was recognized primarily on the basis of the Menelaos/Helen episode as known through vase painting, and the missing metopes in that sequence are usually visualized with the help of two-dimensional depictions. The last three panels of the series have presented problems of interpretation and have been considered proleptic to the narrative, thus again suggesting a creative personality behind the conceit. But they could also be seen as un-

imaginatively "tacked on" to complete the required number of metopes when prototypes fell short. I would rather believe in our own imperfect understanding, yet it should also be admitted that no mastermind was required to suggest the metopal topics and compositions.<sup>28</sup>

It could be argued that the same principle of splitting a narration with "intrusive" elements observed for the south metopes is operative on the east frieze, where the seated gods are divided into two semicircles

separated by the so-called peplos scene. Thus, both the (relatively earlier) metopes and the continuous frieze (presumably executed without Pheidian intervention) would bespeak a single organizer. Similar arrangements for instance, on the Hephaisteion east frieze, and perhaps on the entire Nike Temple<sup>29</sup> are undoubtedly later and should reflect the Parthenon, rather than common practices, therefore attesting to the influence of its inventive composition. Yet the east frieze of the Siphnian Treasury, with its assembly on Olympos and its quadrigas framing a combat focused on a corpse (cf. ill. 24), suggests a comparable conception and is certainly earlier than the Parthenon, for which it could have served as distant prototype.

One more element in the Parthenon program might be significant: the Parthenos' base, as rendered in abbreviated form on one of its replicas, the so-called Lenormant Athena, showed the Birth of Pandora framed by Helios and Selene. These cosmic motifs recur on the east pediment, the north metopes (although the Moon goddess appears on N 29, not on the last panel), and, according to an unusual vase painting reproduction, the interior of the Parthenos' shield, thus strengthening the assumption that Pheidias was the inventor of the motif. Here, too, a different reading of the evidence can be offered. On the east metopes of the Parthenon, only Helios appears (N 14), in keeping with the version of the myth in which Zeus had ordered the Sun god not to rise until the battle was over; thus the painted replica of the interior of a shield (held, in fact, by Enkelados) may allude to the pedimental composition rather than to the engraved rendering of the Gigantomachy. To be sure, a similar framing

of heavenly deities has now been suggested for the Gigantomachy of the Nike-Temple east pediment, but only Helios' horses are attested by actual remains. On the base of the chryselephantine Zeus at Olympia, the Birth of Aphrodite is said (Paus. 5.11.8) to have been bracketed by Sun and Moonthus shown to be a preferred Pheidian motif. It could also be assumed, however, that the concept was "in the air," perhaps as a result of current philosophical theories, and could be applied to various miraculous events without implying the input of a specific master.<sup>30</sup>

The Olympia Zeus deserves one more comment. Its appearance is described by Pausanias in detail (5.11.1-9), and we therefore know the many topics that were represented on the throne, on the screens that prevented visitors from going under it, on the stool, and on the pedestal under the image. Panainos, either Pheidias' nephew or his brother, is named as the painter of the screens, but no other master is mentioned,





although Pheidias undoubtedly used collaborators for such a complex work. The subjects chosen are said to have a definite Attic cast, since Theseus appears twice in Amazonomachies (once, however, as one of Herakles' helpers) and once on the painted barriers, with Peirithoos. Other paintings have local and Herakleian topics that can easily be connected with the architectural sculptures (Sterope and Hippodameia; Herakles and Prometheus; Herakles and Atlas, and two Hesperides; Herakles and the Nemean Lion), but also one with special Athenian significance: Hellas and Salamis holding a ship's prow. An attempt to correlate the message of the cult image with that of the entire temple (which, after all, was fully available for Pheidias' inspection before he started work on his statue) has suggested that *dike* (justice) is the overriding theme, expressed either positively or negatively (the absence of justice hence *hubris*), and within the context of marriage (statue base; east and

west pediments). Some interpretations seem to me entirely convincing (for instance, the gesture of Apollo read in legal/juridical terms), but I have difficulty with some subjects that have been omitted from consideration: Ajax and Kassandra, for instance, and Achilles with a dying Penthesileia (both on the screens), as well as the Theban children carried off by sphinxes, as part of the armrests of the throne.<sup>31</sup> A program, to be called such, has to be coherent in its entirety, and even our admittedly inadequate knowledge cannot account for all our difficulties in the reading.

Finally, the issue of the Ionic frieze. As already mentioned, its apparent anomaly in a Doric temple has been construed as the result of outside influence on the architect: either from Perikles or from Pheidias, given its grandiose conception. The first possibility will be considered in the section on patrons; here I shall address the second.

I follow those scholars who believe that the Old Athena Temple had Ionic prostyle porches topped by a continuous frieze, and that the Older Parthenon (damaged in 480 B.C.E.) (cf. ill. 39) had both the prostyle (Doric) porches and the continuous frieze that appear on the Perikleian building. Iktinos, therefore, would have been following earlier practices, drawing inspiration from Akropolis predecessors in adopting this specific "sculptural" feature. In addition, I visualize any frieze, whether Doric or Ionic, as an *architectural* device. In a Doric temple, as I suggested earlier, the vertical, upward rhythm of the columns and their flutes is carried beyond the horizontal epistyle by the ascending pattern of regulae and guttae, triglyphs, and eventually mutules.<sup>32</sup> In an Ionic temple, the continuous frieze serves as a binding element surrounding

the entire structure, especially on the Greek Mainland which avoids the Ionic peristyle. The *diazoma* (belt) or *tainia* (ribbon), as the frieze zone was called, specifically ties together the prostyle columns of the porches and the virtually free-standing cella, thus connecting what might appear as two separate and unrelated elements of a building (cf. ill. 28). The Parthenon porches, to be sure, were Doric, but the same visual need must have been felt by the planners of the Older Parthenon, since they included an Ionic *toi-chobate* surviving in the extant anta base. I would therefore accept the opposite sequence of events: the architect planning his structure first, on the basis of tradition and visual effectiveness, and then confronting the sculptor with the need for a topic that could fill the entire expanse of the continuous frieze. 33

## The Patron

As repeatedly mentioned, Wesenberg believes that the prostyle porches of the Parthenon were planned originally to carry a Doric frieze; twenty Kentauroomachy metopes had already been carved, for the ten spaces on each side, when Perikles the moving spirit behind the total re-building of the Akropolis<sup>34</sup> won his political victory over his major opponent, Thoukydides son of Melesias, who was ostracized in 443. Perikles then prevailed upon the architect to change his plan, so that a continuous frieze could be used to project his own personal vision of Athenian power through an unprecedented, "human" subject. At that time, the already-sculptured metopes were transferred to the south side of the peristyle, and additional ones were gradually prepared to obtain the required number.<sup>35</sup> These conclusions are reached partly on stylistic grounds, but partly, and perhaps primarily, on architectural observations about the uneven length of the epistyle blocks and of the metopal panels

themselves on the long sides. Perikles alone not Pheidias or Iktinos would therefore be responsible for the presence and subject of the continuous frieze.

Other scholars support the idea of a Perikleian conception because of alleged philosophical echoes in the sculptural program, specifically the anthropocentric theories of Protagoras as embodied in the frieze, and Anaxagoras' interest in celestial phenomena as expressed on the statue base and in the east pediment; the statesman's input is thus advocated from the inception of the project, in the planning stages of the whole.<sup>36</sup> An almost contemporary source, Thoukydides the historian (2.65.9), states that Athens under Perikles was a democracy in name only, but *de*

*facto* under the control of one man. Yet even these positions can be debated.

If the subject of the frieze is *not* what is traditionally assumed, but recounts the story of Erechtheus' daughter and her sacrifice for her city, a Perikleian vision could still be advocated, but not that philosophical tenor that might take it away from the compass of a non-aristocratic sculptor. The impact of a play and its performance are equally plausible and more accessible sources of inspiration for a master. In addition, it has been argued that the historian's portrait of the Athenian *strategos* is influenced not only by his "youthful vision of the great man" but also by his desire to show that his successors were of a quite different caliber. Perikles' wish to detach himself from his aristocratic peers and to reach out to the people may have encouraged him scrupulously to present his building program to the assembly and to obtain their assent in all details. The process, as we know, was too open to the public for elite concepts to have prevailed in the sculptural message. Several scholars have warned against

the danger of reading Perikles' aims and problems in all Parthenon themes, and one encompassing statement (albeit concerning another Perikleian structure, the Propylaia) deserves to be quoted: "Nothing that determines its aesthetic effect has been created by Mnesicles personally. Nor has it been created by Ictinos or Callicrates. And naturally still less by Periclesa pleasant thought!or by Phidias." 37

So far, we have been discussing the Parthenon and its unusual position in our scholarship: this is a building preserved almost in its entirety, made in Athens at the peak of the city's power, cited by many literary sources, and obviously influential over a wide geographic and chronological range. Yet we cannot solve all its problems. Can we reach safer conclusions by examining the issue of sponsorship in more general terms?

In Settim's words (1994, 8-9), no image ever existed outside a specific agreement of production between the artist and the person(s) who commissioned the work, who would usually choose not only the master himself but also the materials he is to use, as well as determine the relative cost of the project and reserve final approval. Coarelli (1980, xxvxxvii) reminds us of the specificity of contracts in the Middle Ages and the early Renaissance, which make it clear that masters were drawing from an established repertoire that the sponsor could visualize and approve in advance. Something vaguely comparable to a salesman's catalogue must have existed for the manufacture of Roman sarcophagi, and the diffusion of motifs across geographic and ethnic boundaries assures us that architectural sculptures were often based on pattern books.

Patron's input is particularly obvious in the case of kings and rulers, and most evident in architectural features. We can recall here the Pergamene capitals used in the stoas of Attalos and Eumenes in Athens; the Macedonian features of the Philippeion at Olympia; the imitation of Athenian buildings in the Nereid Monument at Xanthos, and especially at Limyra (cf. fig. 14, ills. 12, 34), probably under orders of the Lykian Perikle. Even "democratic" Athenians may have attempted to show their (fabricated) autochthony through the adoption of the Ionic order, as exemplified by their stoa at Delphi and several Akropolis structures.<sup>38</sup> Yet sculpture is narrative, therefore more explicit in its message. Did sponsor's input extend to the content of the architectural sculpture? I can only cite specific instances where such influence can be reasonably surmised, while admitting that much remains to be learned.

A typical example is the most famous tomb of all, the Maussolleion at Halikarnassos (cf. ill. zz). It not only incorporates Greek architectural forms (its upper structure resembles a Greek temple), but also its sculptural decoration glorifies Greek heroes, suggesting the Karian Mausollos' intended identification with Theseus and Herakles. To be sure, it might be argued that a tomb is a very different monument from a religious structure and could therefore be entirely programmed by the future owner. Indeed, the unusual appearance of the Macedonian tomb at Lefkadia (cf. col. pl. 4) half temple, half stoa; partly painted, partly in relief confirms the possibility, on Greek territory, of hybrid forms for private buildings, although unthinkable for public/religious constructions. In addition, some types of buildings seem to require, or permit, more sculptural embellishment than others, thus offering greater or lesser opportunity for iconographic programs.

In general terms, a chronological progression could be suggested. During the Archaic period, treasuries only, at the panhellenic sanctuaries, appear to explore every possible area for storytelling hence the modern misnomer for what could be the first Temple of Hera at Foce del Sele (cf. ill. 32), and the theory that the Classical Parthenon, with its abundance of sculpture, was not a true temple but a glorified treasury. On the other hand, the sixth-century restraint of the Greek Mainland does not apply to Asia Minor, where both the Ephesian Artemision (cf. ill. 4) and the Didymaion appear overloaded with decoration.<sup>39</sup> During the fifth century, the amount of architectural sculpture on temples increases, both metopes and pediments being often used for the purpose, but treasuries are in decline, at least in terms of their embellishment. Some temple-like structures, like the Athenian Propylaia, may recall the



sacred buildings to which they give access, yet they remain basically free from figured decoration, at least until the late fourth century and the Hellenistic period, and their pediments seem never to have carried sculpture.<sup>40</sup> By the fourth century, temple ornamentation turns inward, with greater emphasis on interiors and fewer sculptures on the exterior except for some imitators of the Parthenon (e.g., the Argive Heraion), some respecters of tradition (e.g., the Apollonion at Delphi), or some puzzling buildings that have defied definition (e.g., the Delphic Tholos). Individual types also appear, and are subject to their own laws: choragic monuments like that of Lysikrates (cf. col. pl. 5), tombs and heroa, which imitate religious architecture, at least in some details. The now ubiquitous stoas are still without architectural sculpture, besides minor details; the akroterial groups that adorned some of the early porticoes are no longer fashionable, and even the fifth-century examples seem to

have occurred only in conjunction with projecting wings, thus over small temple-like façades that were however, like the propyla, void of pedimental decoration. This state of affairs continues more or less unchanged during the Hellenistic period, except for a general tendency toward greater elaboration, but a new feature of the times is the preference for decorated altars and stage fronts. In brief, the idiom of architectural forms changes although its vocabulary remains somewhat the same. Yet these newly popular building types can better express the message of their sponsors.

This seems to be the case with the so-called Pergamon Altar (cf. figs. 12, 28). Although its chronology and even its identity are still being debated as new investigations take place in its foundation, there is no question that the colossal structure was promoted by the Attalid rulers, who must have carefully controlled its sculptural program, especially since the complexity of the Gigantomachy on the podium is inconceivable without the learning and the bibliographical resources of the famous local Library and its librarians. The masters who carved the podium reliefs came from different areas, as attested by the remnants of their signatures, and no single name has come down to us through the sources as the mastermind behind the project. Yet the style of the Gigantomachy appears remarkably uniform, and the composition, despite its intricacy and variety of forms, is entirely coherent, with alleged allusions to Macedonia and Rome; similar allusions are postulated for the Telephos Frieze.

Such subtlety and punning would have been beyond the carvers' capabilities.<sup>41</sup> Yet, if the "Altar" is instead a dynastic heroon or an Attalid victory monument, its purely sacred nature could be questioned.

Another example may be more pertinent. The direct intervention, not of a sponsor but of a dominant political personality, has been suggested for the fourth-century Temple of Apollo at Delphi. Noting that the east pediment repeated the theme of the god's epiphany which was represented on the sixth-century predecessor, but that the west pediment replaced the earlier Gigantomachy with a scene of Dionysos and his entourage, Stella Miller-Collett has suggested that the change was motivated by Philip of Macedon, whose family claimed a special connection with that deity. The king was a powerful figure at the time when the Apollonion was being rebuilt, and although the God of Wine shared the temple and was becoming increasingly popular toward the end of the fourth century, the possibility that his sculptural inclusion was promoted by Philip seems strong.<sup>42</sup>

We can easily acknowledge Macedonian political control over fourth-century Delphi, but did private individuals and foreign contributors have any say in matters of programs or religious structures? Despite the great resources of the Delian League, we know from extant accounts that also private donations were made to the Akropolis building project under Perikles. In the third century B.C.E., the women of Tanagra contributed "no more than five drachmas" each toward construction of the Temple of Demeter and Kore, and the resultant stele inscribed with the names of the contributors records nearly 400 drachmas given by 97 women, while 38 gave clothing and jewelry. Would these women have expressed an opinion about the final appearance of the temple or the type of sculpture that could adorn it? Nothing is known about it. During the Hellenistic period, many wealthy individuals and rulers donated entire theaters, aqueducts, stoas, public and sacred buildings not only to their

own, but even to cities in other areas of Greece and to panhellenic sanctuaries. Indeed, the practice had started earlier, for instance, with gifts by the Karian Hekatomnids in the fourth century. In addition, the substantial contribution (in alum) to the preceding phase of the Temple of Apollo at Delphi by the Egyptian king Amasis (Herod. 2.180), and its completion in marble by the wealthy Athenian Alkmeonids (Herod. 5.62) are well-known events. Yet I suspect that these generous donors had little control over sculptural programs in religious contexts.<sup>43</sup>

No external, political influence certainly not by Amasis, nor by Peisistratos, or Siphnos, or even post-Marathon Athens can be envisioned for the Archaic stage of the Delphic sanctuary, when religious bodies alone (the local priesthood and the Amphiktyonic Council)

should have suggested sculptural programs and authorized proposed messages. Thus the myths on the Siphnian Treasury seem particularly relevant for Apollo and the locale, rather than for the island. Or is our interpretation colored by the fact that we know so little about Siphnos and its history? Certainly our various attempts to identify a unified program can only agree on the most general terms that the will and power of the gods is the overarching message.<sup>44</sup> The Athenian Treasury may have carried a more coherent announcement of the polis' victory, yet it was still couched in religious terms, through universal myths that could be read at different levels and would have received the approval of the local priesthood.

How difficult it is for us to decipher these sculptural messages when remains are fragmentary is demonstrated by the early Archaic metopes of the so-called Sicyonian Treasury (cf. ill. 31); as long as they are attributed to Sicyon, they can be interpreted in terms of the official policy of Kleisthenes, tyrant of Sicyon, and of Peloponnesian cults. Yet identification of the treasury to which the carved metopes belonged is based solely on circumstantial evidence—the panels were found reused (together with blocks from at least two structures, one of them round) within the foundations of a late Archaic treasury described by Pausanias (10.11.-2) as being next to the Siphnian and belonging to Sicyon; they seem to be in Peloponnesian style; and are made of Peloponnesian limestone. Even their date, around 570-560, is primarily based on the time of Kleisthenes' rule rather than on intrinsic data. Others (myself included) have viewed the metopal arrangement and even the topics as typical of

Magna Graecia, but such arguments could be considered subjective and debatable. More important for our purposes is the reuse of the architectural blocks. Can we assume that only Sikyon had ownership of the material, thus ensuring that the earlier structures belonged to the same city?

French publications have fully accepted such an assumption, and have therefore attributed great importance to the location of the re-employed blocks; yet they list very few pieces as belonging to the building with the carved metopes (the so-called Monopteros), and admit that some were found in different spots, one even in the Roman agora, perhaps used for the third time in the Christian period. In addition, several other treasuries are said to incorporate blocks of unknown origin, thus attesting to the widespread use of second-hand material; some stones from the sixth-century Temple of Apollo were even found in the terrace wall East of the Stoa of Attalos, therefore *outside* the temenos proper.<sup>45</sup>



This pattern of distribution seems to imply that blocks, from whatever building, became the property of the sanctuary, which could then distribute them as needed, perhaps even at a price. Confirmation may come from Olympia, where sandstone architecture from an earlier Sicyonian Treasury is said to have been used all over the Altis, for instance, in the foundations of a small round altar East of the Heraion. Some Hellenistic inscriptions from Lebadeia (Boiotia) regarding the Temple of Zeus Basileus state that damaged blocks, or blocks that were not removed from the area within five days, were considered sacred. This type of evidence suggests to me a much greater control on the part of religious authorities than usually surmised. 46

Both stone and terracotta items connected with sacred buildings could be also ritually buried. An extensive listing has been drawn up by Donderer, who points out the continuity of the practice for the Etruscans and the Romans, whereas in Greece it seems limited to Archaic and Classical times. Some examples belong to the realm of sculpture in the round, but some come from pediments, and carved capitals are also represented. He concludes that such ritualistic burial took place primarily for religious reasons, but he also mentions blocks reused within sanctuaries or shrines, thus supporting my position of religious ownership and control. Political reasons are also considered possible.<sup>47</sup>

To be sure, a whole sanctuary could promote a specific policy, either as representative of a region or on its own behalf. Yet I find such theories somewhat hard to prove, especially in view of our imperfect understanding. It has been suggested, in fact, that the sculptural program of the Temple of Asklepios at Epidauros was meant as a conciliatory gesture toward Athens, through the selection of topics that alluded to the Parthenon and the Nike Temple.<sup>48</sup> I believe that the topics were instead a glorification of local myths and heroes, but the important issue here is whether sculptural messages could cross regional boundaries, even when displayed at a popular healing sanctuary like Epidauros. After all, Athens had its own Asklepieion, albeit not as famous as the Peloponnesian "spa."

After examining all this evidence, I return to my original position: internal and external influences could be brought to bear on a sculptural program, especially for buildings of a secular nature; yet sacred structures within sanctuaries, especially those with panhellenic character, were probably subject to priestly (or at least religious-minded) control



that would ensure the appropriate tone of the sculptural messages suitable for both the deity and the locale, for the present as well as for the future. Pedimental emphasis appears to have shifted through time, from a central divinity or divine emblem towering on the axis of the gable to a more uniform, less graduated composition where no gods at all might be included. Yet this change may mean no more than the greater ability on the part of sculptors to respond to the strictures of a triangular frame. I do not even subscribe to an often mentioned theory that a canonical formula existed for Classical gables, whereby one of them, usually the east, depicted the epiphany of the major divinity, and the other enclosed a scene of action or violence: enough examples to the contrary exist to make us doubt the statement, and our evidence is too fragmentary for all-encompassing pronouncements. Nor do I entirely accept the suggestion that metopes were reserved for epic and heroic myths, and

pediments for divine appearances far too many combinations exist, especially in terms of geographic and chronological distribution, to draw general principles from them. It should be stressed, moreover, that carved metopes on temples are used either sparingly or exceptionally, and we should not be influenced by that anomalous building that we call the Parthenon.<sup>49</sup> One last observation may however be of interest.

As Marconi (1994, 305) has pointed out, strict laws governed access to sanctuaries. They could not be entered, without previous purification, by persons who had been in contact with a recent death or birth, or had engaged in sexual activity. Those guilty of homicide, war traitors, adulterers, and male prostitutes were *never* allowed on sacred grounds. Yet the metopes of Temple E at Selinous (cf. ill. 27) show that the world of the gods is not subject to such laws. Zeus and Hera, in the famous metope of the unveiling of the bride, are about to engage in sex, and so is Apollo pursuing a woman. Death is adumbrated in the metopes of Herakles and the Amazon, Athena and Enkelados, Artemis and Aktaion. This last panel exemplifies another transgression, since dogs and wild animals were not allowed within temene, yet not only do we see the hunting dogs of Aktaion, but the remnants of a metope possibly depicting Atalante and Meleager imply the presence of the boar. In modern terms,

we could consider this a counter-message: "do as we say, not as we do"; yet contemporary viewers might have read it differently, thus underscoring once again how difficult it is for us to penetrate that ancient and foreign world of prayers in stone.

## Notes to Chapter 6

1. For Michelangelo's conception, see Balas 1995. The author maintains that the meaning of the program was deliberately veiled in obscurity, intelligible only to an intellectual elite; through his unfinished, fragmentary realization, "Michelangelo conceived a cryptic, magical world of potent allegorical images designed not simply or primarily to commemorate the departed Medici but to help achieve elevation for their souls" (cited from the dust jacket of the book). In addition, on May 2, 1996, Dario Gamboni presented a colloquium at CASVA in which he argued that visual ambiguity played a major role in the graphic arts and painting around 1900.

2. For these concepts, see Coarelli 1980, xvixvii and bibliography in n. 21 (techne, technitai, major and minor arts), xxvxxix (difference between Middle Ages/early Renaissance and 15th16th centuries in the perception of artists, and comparison with Hellenistic Greece, when anecdotes about artistic personalities begin to emerge). The entire book is a collection of essays translated into Italian and excerpted from major publications by individual authors, which acquire specific relevance from their juxtaposition. They are cited henceforth with page references to Coarelli 1980, but with the author's name in parenthesis. On Greek terminology for the arts, see therefore also pp. 23132. (J.-P. Vernant); on poets as artisans, pp. 20724 (J. Svenbro).

3. This general procedure is discussed in detail in Burford 1969, ch. 5 (11958) with specific reference to Epidauros; the quotation infra is from her p. 130. See also Coulton 1982, 2023; esp. p. 22 for comments on tyrannical/aristocratic practices during the Archaic period. Some helpful comments also in Altekamp 1991, 24967.

4. Coulton 1982, 14951.

5. Burford 1969, 13845, discusses the issue in general terms, though basing her comments primarily on the Epidaurian evidence; the quotation is from p. 139.

6. For a good discussion of this problem, and the various points of views, see Coulton 1982, 1529, esp. 23; for a more concise account, see also Coulton 1983, although his skeptical position on architectural designs has been somewhat invalidated by recent finds (cf. *infra*, n. 16). He is a representative of the first school; the most influential exponent of the second is Bundgaard 1957.

Liturgy (*λειτουργία*) was the Greek term for a public service or office held on behalf of the city, often as a form of taxation for wealthy citizens.

SvensonEvers 1994 has come to my attention too late to be fully considered; see, however, pp. 50320 for a discussion of the position of Greek architects in the 5th and 4th cs., and cf. pp. 11650 on Pytheos and Satyros, 157211 on Iktinos, 21213 on Karpion, 21436 on Kallikrates.

7. Vitr. 7. praef. 1115. His list of treatises includes some on perspective and stage building (by Agatharchos, a painter) and on optics (by Demokritos and Anaxagoras, therefore by philosophers). But he also mentions Silenos on the proportions of Doric structures, and, among the 6th-c. masters, Theodoros on the Samian Heraion, Chersiphron and Metagenes on the Ephesian Artemision. Those "who could, but have not, written" ( 5) include some unknowns, and, in

Athens, Antisthenes, Kallaischros, Antimachides, and Pormos who built the foundations of the Olympieion for Peisistratos. See also the comments by Coulton 1982, 2425.

Sculptors known to have written treatises are Polykleitos (the Kanon, as mentioned, e.g., by Galen = Stewart 1990, 265, T 69) and Eu-phranor (who was, however, also a painter, and seems to have written on painting, rather than on sculpture: Pliny *NH* 35.12829 = Stewart 1990, 287, T 117). Xenokrates was a 3rd-c. sculptor, although he wrote on painting, as well as on *toreutike* (bronze work); his treatise was probably a sort of art history: Pollitt 1990, 23, but cf. the cautionary comments by Stewart 1990, 299. The 1st-c. Pas-iteles, although certainly a sculptor himself, wrote on marvellous works of art rather than on his own principles. Other author-sculptors mentioned by Pliny (*NH* 1.34 = Stewart 1990, 299, T 145) seem also to have written on bronze statuary, thus perhaps being concerned with the technical aspects of the process. Additional writers mentioned by Pliny

are either totally unknown or did not write on sculpture.

For a discussion on professional treatises in antiquity, with the architectural writings possibly influencing the inception of the sculptural, see Pollitt 1995.

8. Types of inscriptional evidence extant from antiquity: Coarelli 1980, 112 (H. Lauter).  
Epidauros accounts: fullest reporting and translation in Burford 1969; see also her pp. 9395, Table I, for various types of contracts as extant from eight sites, with discussion on pp. 96109.  
Delphic accounts: Bousquet 1988 (esp. p. 105); see also additional bibliography and comments on the temple in Ridgway 1990, 1721 and ns. 56.  
Parthenon accounts: summary in Burford 1963, 2932. Translations of parts of the accounts for Parthenon and Erechtheion: Pollitt 1990, 19093. Each of these publications mentions other examples of ancient building inscriptions. See also Turner 1994, 264361, esp. 26769.

Specialists receiving special remuneration:  
Coarelli 1980, 12227 (Lauter); contra,  
Coarelli 1980, 14048 (N. Himmelmann). See  
also Wesenberg 1985; Stewart 1990, 6566.

9. Plut. *Per.* 14.1 reports that when complaints were voiced about the high cost of the Perikleian building program, Perikles offered to bear the expenses personally and to amend the inscription to read "of Perikles" rather than "of the Athenians," thus provoking a strong reaction in the assembly. This anecdote may be fictitious (see, e.g., Davies 1971, 459 n. 1, who calls it "financially impossible" and suggests that Perikles' offer referred instead to a springhouse), but it reflects a probable state of affairs, given the historical opposition by Thoukydides son of Melesias, on which see infra.

10. Temple of Apollo at Delphi: Bousquet 1988, 55; payments were made in Aiginetan drachmas, that he converts into Attic drachmas at the conventional exchange rate of 7/10 (1 Att. talent = 6000 Att. drs.). He includes the carving of the sima, at 2 Aig. talents, for a total of 24 talents (100,800 Aig. drs. = 134,400 Att. drs.) for the whole sculptural embellishment, carried out between 340 (sima) and 327 B.C.E. (pediments); the metopes, surprisingly, seem to have been carved ca. 337. Stewart 1990, 66, calls the pedimental payment "astronomical." My information on the Parthenon payment for the year 434/3 is derived

from Stewart, loc. cit. (cf. Burford 1963, 34). Note, however, that quarry work on the pedimental blocks, with consequent expenditure, had started in 438/7. For comments on quarries and the value of quarrystone, see Burford 1969, 16875, and Table VI on costs (p. 193).

11. My figures are based on Burford 1969, 21220, translating the inscribed stele (AIBIII). I have not been able to find out whether she gives the amounts in Aiginetan or in Attic currency, but I have assumed the former, given her statements on pp. 12526. Adding all expenditures that could be considered connected with the actual fabric of the temple has given me a total of 79,837 Aig. drachmas (to be revised upward since I have not included small, unspecified payments and fractions of drachmas, and since the figures for many items are not preserved) as against a cost of 13,127 drachmas for sculptural embellishments again, a relative figure. Even adding the cost of the workshop (1,97 drs. Burford, p. 82), the total comes to 94,881 Aig. drs., which should translate to approximately 135,600 Att. drs. Burford, 8283, in her comparative chart of the costs for all the buildings within the Epidaurian sanctuary (including the chryselephantine Asklepios), gives the total

of 23 talents for the Asklepieion, which translates into 138,000 (Att.) drs., not too far from the figure I obtained. By contrast, the Temple of Apollo Maleatas, which also included sculpture, is said to have cost only 6 talents. The cost of the Perikleian buildings seems to have been much higher: that of the Parthenon (Burford 1969, p. 83 and n. 2) is calculated between 460 and 500 talents, that of the Propylaia around 200. Prof. Andrew Stewart points out to me that much of the money must have been paid for the extensive labor required to obtain the exceptional finish of all architectural blocks and joins, as now revealed by the recent examination of the Parthenon structure: cf. Korres 1994.

On the *typoi*, see the discussion in Ridgway 1997, 3637; the theory on the cult-statue base is by Posch 1991. Burford 1969, 57, translates correctly as "reliefs" but assumes they are the six metopes over the pronaos, carved by Timotheos.

12. Under the term "Greek Mainland" I here include the nearby islands, and, eventually, the Kyklades. The six decorated examples listed by Knell 1983, 230 (chart) are the Apollonion at Delphi, the Athenaia at Tegea and at Mazi, the Artemision at Kalydon, and the Asklepieion at Epidauros, the doubtful example being the Metroon at Olympia. In addition, Knell does not list the Argive Heraion, which I would include within the 4th c. At least three more Doric temples on Paros could be added to Knell's chart. Knell 1990, ix, states that architectural sculpture should be considered the exception rather than the rule, and that its inclusion marks each temple as a monument of specific importance.

13. Mazi temple and its sculpture: Trianti 1986; see also Boardman 1995, 2425, fig. 8; Ridgway 1997, 3034. The temple was a peripteral structure, 6x13, almost as large as the Athenian Hephaisteion. We may also recall the Temple of Aphaia at Aigina, where the sculpture for at least one gable seems to have been entirely replaced.

14. Temple of Apollo at Bassai: Kelly 1995, esp. fig. 1 on p. 278, with the Archaic and the Classical temple plans juxtaposed, and fig. 8 on p. 245 for a reconstruction of the Archaic interior. The other temples cited in this paragraph can be

checked in any architectural handbook, e.g., Dinsmoor 1950. I happen to believe that both the Older Parthenon and the Old Athena Temple had prostyle porches and continuous friezes: cf. Ridgway 1981, 74 n. 2; Ridgway 1993, 39597.

15. For imitation within the circle of Perikleian architects, see, e.g., *supra*, ch. 2 n. 48 (Büsing 1990); for 4th-c. buildings (esp. imitating the Erechtheion), see Ridgway 1997, 4748, 79, 9899, 103 n. 4. For Attic traits in Ionic temples of Asia Minor, as allusions to 5th-c. Athens, see Schädler 1991. The close similarity in moldings, especially the carved sima, between the Athenaion at Tegea and the Temple of Zeus at Nemea has led to the suggestion that masons released from working at the one site around 340 moved to the other, where construction seems to have taken place in the 330s and 320s. Yet Skopas, the architect at Tegea, was certainly not involved at Nemea. It would therefore seem as if workshop traditions, and even local (Peloponnesian) preferences in plan and use of interior orders, in this case may have been stronger than the architect's personal style. For a fuller discussion, see Ridgway 1997, 4854.

16. On the Didyma drawings, see Haselberger 1983 (with additional examples on Greek buildings, p. 122 n. 112), 1991, and, more recently, "Regressive Progress: Designing Columns at Didyma," Abstract, *AJA* 101 (1997) 374. On Priene, see the statement by W. Koenigs cited by M. J. Mellink, "Archaeology in Anatolia," *AJA* 97 (1993) 12627. That it was typical of Hellenistic (Asia Minor?) buildings not to be finished at once was brought out in the discussion following Kreeb 1990.

17. Erechtheion, beginning of work: see supra, ch. 5 n. 6; final accounts: *IG* 13, 47479. Parthenon: Wesenberg 1982; he believes that Iktinos was active only in the first half of the 5th c.; his building would thus be pre-Perikleian, together with the pre-Perikleian Telesterion at Eleusis and (at the end of his career) the Bassai Temple. The conflation of all architects as responsible for a single-phase (Perikleian) Parthenon would have begun in the 1st c. B.C.E. I believe this theory is partly discredited by the later date now firmly established for the Classical Apollonion at Bassai; yet other architectural arguments advanced by Wesenberg may be valid. See infra.

Note that the shift from one master to another, presumably because the first died, can occur also with sculptors: witness the case of Praxias and Androsthenes who carved the pedimental sculptures for the 4th-c. Apollo-nion at Delphi: Paus. 10.19.3.

Interruptions during construction have been postulated also for the Athenian Treasury at Delphi and the Hephaisteion, but they are primarily based on stylistic observations rather than on documentation. The case of the Telesterion at Eleusis may be somewhat stronger. Some temples, even relatively small, like that of Nemesis at Rhamnous, were never completed, and the Propylaia remained without the final finish.

18. Changes in the Olympia echinoi: Krauss 1957; cf. also Coulton 1982, 104105 and fig. 42 for comparable changes in the capitals of the Athenaion at Assos. Parthenon: change in proportions of east porch: Dinsmoor 1950, 162; change from Doric to Ionic frieze: Wesenberg 1983. A detailed explanation, based on the most recent observations, is given by Korres 1994, 9495 n. 28. See also *infra*.



19. Pytheos is said by Vitruvius to have written on the Maussolleion in collaboration with Satyros, a sculptor; it is doubtful whether the Vitruvian statement implies the same type of relationship that some believe existed between Iktinos and Pheidias, although Stewart 1990, 180, would attribute to Satyros a leading role in the Maussolleion project ("maybe as director of the sculptural program as a whole"). No evidence is however available from ancient sources. A full discussion on the role of Skopas at both Tegea and Halikarnassos appears in Ridgway 1997, 5152, 14546; for my early doubts on the Skopasian style of the Tegea pediments, see my review of Stewart 1977 in *Classical Outlook* 57 (1980) 11415. On Timotheos, see supra, this chapter, n. 11. On the (limited) role of Pheidias: Wesenberg 1982, esp. 113; 1983, esp. 8283; 1985, esp. 64 and n. 44, with bibliography. For thorough discussion, see Himmelmann 1977 (with historical outline of generally held beliefs), 1988. Contra,

Borbein 1989. For a more recent attempt to reconstruct Pheidias' entire career, see Harrison 1996a, esp. 3852 on the Parthenon sculptures.

20. Plutarch *Per.* 13.49; 3 .25; for excerpts see, e.g., Stewart 1990, 25758 (T 47) and Pollitt 1990, 5354; cf. also Pollitt 18789, on sources for the Perikleian building program, and pp. 5458 for other ancient writings on the Parthenon and the Athena Parthenos. Stewart 1990, 25759, includes two of these passages as well (T 46, T 48) and judicious comments. The anecdote of Pheidias' portrait has been discredited by Preißhofen 1974. For a recent commentary on Plutarch, see Stadter 1989, Iii, who states that the writer's "rhetorical and methodological practices . . . prohibit us from considering Plutarch as an absolutely reliable transmitter and evaluator of historical information concerning Pericles and his contemporaries." See also his pp. lili which list guidelines for our proper reading of the *Lives*. Himmelmann 1977, 90, connects Plutarch's statement about Perikles and Pheidias with Trajan and his universal artist Apollodorus.

21. Wesenberg 1985, 64 and n. 44, on the collective character of architectural sculpture; cf. p. 63 for remarks on the sculptors of the Erechtheion frieze (the focus of his article), who are listed in the building accounts but are otherwise unknown. If some major figure provided sketches (*not* models) for them to follow, his name has not been recorded (or preserved) in any form. Plutarch *Per.* 13.9, states that Pheidias' name "is inscribed as the artist [of the Parthenos] on the stele," prompting Pollitt 1990, 53 n. 1, to comment that what Plutarch meant by the stele is not clear, and may refer to the base of the cult image. I suppose, however, that the chryselephantine statue may have had a separate inscription (recorded on a stele), not as a record of expenditures, which are included among the building accounts for the temple, but as a contract or a set of specifications, or even a proposal submitted to the supervising board and officially displayed like the extant slabs. For various hypo-

theses on the interpretation of Plutarch's passage, see Himmelmann 1977, 8283.

22. Himmelmann 1988, esp. pp. 21718; he also mentions that the Gigantomachy metopes on the east side are based on traditional iconography and do not form a thoroughly integrated whole; yet recent scholarship (Schwab 1996) reads the panels as a more coherent composition. Some of these judgments, on either side of the issue, could inevitably be considered subjective and thus less significant as arguments either in favor or against Pheidian involvement.

23. These points have most recently been made by Borbein 1989; the quotation is from p. 104. Note that he would accept (pp. 101102) that Pheidias was not the "inventor" of the Parthenon style, which probably as such did not exist. The master's role would have been that of conceptual coordinator, rather than that of the leader of a School or a workshop.

Correlation between the Athena Parthenos and the Parthenon sculptures would be even closer than usually assumed if the Pandora on the statue base mentioned by Pausanias (1.25.7) is in fact the daughter of Erechtheus appearing on the east frieze, as argued by Connelly 1996, 7276.

Wesenberg 1982, 113 n. 64, lists several scholars who believe that the layout of the Parthenon cella was influenced by Pheidias' conception for his statue; he maintains, however, (cf. p. 124) that "Kallikrates' plan" moved *not* from the core outward, but from the peristyle inwarda plausible supposition; cf. also Korres 1994, esp. 8990. Yet Korres (n. 29 on p. 95) suggests that there was "an extremely constructive discussion" between sculptor and architect, to account for the differences in metopal sizes, as reflected by architrave and stylobate blocks, which he considers motivated by the various subjects and number of figures on each panel.

24. Stylistic evolution in architectural sculpture: Ridgway 1985, 1995a; in architecture: e.g., supra, this chapter, n. 18. On the architectural obstacles to reconstructing the sequence of metopes at Foce del Sele (Treasury) on the basis of their topics, see the comments by Conti 1994, and discussion supra, ch. 3 and n. 31; see also other examples mentioned in that chapter. The very elaborate schema suggested by Faustoferrari (1993, 1996) for the Amyklai Throne may rest on a circular argument, or at least on the assumption that Pausanias' listing of its scenes (3.18.919.5) is entirely correct. Even if the Periegete was aided in his identifications by written labels, we cannot be sure that the version of the myth known to him was the same as that current at the time (and place) of Bathykles and his sponsors.

Selinous Temple E: the "biographical" association is suggested by Marconi 1994, 31213; moving from the center of the pronaos toward the north, the viewers would say to themselves: here is Zeus who marries Hera (metope E4), who once chased the daughters of Proitos (E5), who after many vicissitudes were healed by Artemis, who here punishes Aktaion on behalf of her father Zeus (E6). See also supra, ch. 3 n. 24. On p. 307 Marconi mentions that there are good reasons to doubt that the Doric frieze from the Archaic to the Classical period moves toward unity of content and of theme or protagonist, and that the concept of unity is probably modern.

25. Modification to Olympia cella prompted by Pheidias: Borbein 1989, 103. Athenian elements, both in materials used and in iconography, within Zeus' decoration: Himmelmann 1977, 86.

26. For the themes on the Parthenos, see *supra*, ch. 5 ns. 16, 3334, and *supra*, this chapter, n. 23. East metope 4: most recently Schwab 1996, esp. 8990. Gigantomachy allusions on frieze and statue: Ridgway 1989. Further correlation could be sought with the corner akroteria: *supra*, ch. 3 n. 40.
27. Some theories on the frieze are summarized by Jenkins 1994 and 1995; see also Ridgway 1981, 7679. The new theory is by Connelly 1996; see also

ead., "The Parthenon frieze and Periclean Athens: Democracy, Self-Sacrifice, and the Common Good," Abstract, *AJA* 100 (1996) 383. Published reaction has been based so far on oral presentations before the appearance in print of her lengthy argumentation: see, e.g., Jenkins 1994, 29 and n. on p. 45; O. Palagia, *Times Literary Supplement*, April 28, 1995, p. 19; and an article, originally delivered as a lecture in 1993: Harrison 1996b. For a recent interpretation of the frieze questioning the Panathenaic-procession reading, see also Pollitt 1997, and cf. supra, ch. 3 ns. 1920.

Attribution of the Kentauromacy metopes to a predecessor of the Parthenon was suggested by R. Carpenter and J. A. Bundgaard, as summarized by Wesenberg 1983, 6567; cf. n. 29 for his own statement on the "after-thought." See also *infra*.

28. It is well to remember that the Athena Promachos on the Akropolis had an equally decorated shield, on which the Kentauromacy seems to have been only one of several topics: Paus. 1.28.2, with attribution of the engravings to Mys rather than to Pheidias. Theoretically, one could assume that a master other than Pheidias was responsible for the Parthenos' shield as well. Note also the marble shield from Sparta: *supra*, ch. 5 n. 34, and cf. n. 33 on the Amazonomacy at Athens.

On the Ilioupersis and vase painting prototypes, see, most recently, K. A. Schwab, "The North Metopes of the Parthenon and the Palladion," Abstract, *AJA* 100 (1996) 383; cf. also Dörig 1982, pls. 3849. For the proleptic series, see supra, ch. 5 and n. 45 (Simon 1975).

29. Not only is the east frieze of the Nike Temple composed as a gathering of two divine groups converging toward a central focus, but also the total arrangement of the other three sides could be seen as actions taking place on different battlefields and controlled by the Olympians' will: see Ridgway 1981, 91 and n. 32.

30. Parthenos' base: most recently, Connelly 1996, 7276 (on interpretation), Leipen 1971, 2427 (on reconstruction), and figs. 1 and 63 (no. 1) for Lenormant Athena and detail of its base. Vase (RF krater, Naples NM 2045) showing interior of painted shield: *LIMC* 4, s.v. Gigantes, no. 316 pl. 142; cf. Leipen 1971, fig. 84. Other vases used to reconstruct the Parthenos' Gigantomachy provide prototypes for individual gods and giants, but not for the personified Sun and Moon: cf. Leipen 1971, 4650. Examples cited by Vian (*LIMC* 4, commentary, p. 264) show astral symbols, or the Sun god alone, or (in the Hellenistic period) Sun and Moon taking part in the battle. Sun ordered not to rise: Apollod. *Bibl.* 1.6.13. The east metopes of the Parthenon could easily have included a descending Selene, who would have confirmed the message of victory implied by the rising Sun (cf. Schwab 1996, 90); yet they begin with Hermes. Note the new reading of the sequence suggested by Schwab 1996,

89 n. 39. Nike Temple east pediment: Brouskari 1989. Pausanias (10.19.3), describing the pediments of the 4th-c. Apollonion at Delphi, mentions the rising Sun, but his wording makes it unclear whether it was part of the east or the west gable.

31. Theseus' and Herakles' Amazonomachy: on a bar of the throne, in the round (Paus. 5.11.4). The other Amazonomachy in which Theseus appeared

was on the footstool; the subject was presumably the attack on Athens, since Pausanias (5.11.7) specifies that it was "the first Athenian act of valour outside civil war" (P. Levi's trans.). Dike as Olympia program: Tersini 1987, esp. 15254 (on marriage) and 15759 (on correlation between statue and total program). For a comparable suggestion, although limited to the temple sculptures, see Stewart 1983. On the gesture of Apollo, although discussed with reference to Athena and her announcement of voting results, see Boegehold 1989.

32. Junker 1993, 107, 10916, explains the entire use of metopes, carved and uncarved, in architectural terms and as a form of emphasis on elevation and vertical versus horizontal design; I do not agree with some of the conclusions he reaches with regard to the sculptured panels (he explains the Sicilian form of decoration simply as a method of stressing the main façade, in keeping with the layout of the plan), but I would accept the general principle.

Korres 1994, esp. 92, makes a point comparable to mine in emphasizing Ionic influences and distinctive temple plans in pre-Perikleian architecture, with specific reference to the Old Athena Temple and the Older Parthenon. He also states (p. 93) that the "extremely rare nature of the front and rear porticoes of the Parthenon" was "not the creation of the geniuses who designed the great temple, but part of the temple-building tradition of the Acropolis." But see also McGowan 1997.

33. For previous mentions in this book, see chapter 2, p. 48 (Samothrake, Propylon of Ptolemy II) and p. 54 with n. 54 (Doric frieze, terminology); chapter 4, pp. 12728, and ns. 6365 (use of "blue ribbon" to tie together porches, and to unify levels in the case of the Erechtheion, which I consider the true successor and imitator of the Old Athena Temple core, after its [Doric] peristyle had been damaged and removed). See also Ridgway 1981, 7376 (esp. 74 n. 2, on predecessors) for a more extensive discussion of these concepts, and Ridgway 1993, 39596 (= 1977, 27172), with bibliography on the Old Athena Temple frieze. To be sure, my understanding of the Parthenon frieze could be undermined by Korres' suggestion (1984, esp. 52 and fig. 5; 1994) that the door wall of the Parthenon pronao also carried a carved continuous frieze corresponding to the level of that over the prostyle columns. Yet even this arrangement would not destroy the effect of the frieze around the cella,

although it might considerably affect our interpretation of the carved subject.

34. Much has been written on the Perikleian building program, which continues to attract interest, either positive or negative. See, most recently, Session IVC at the 97th Annual Meeting of the Archaeological Institute of America, and the comments by R. F Townsend: "New Perspectives in the Study of Periclean Athens: An Introduction," Abstract, *AJA* 100 (1996) 38182.

35. Wesenberg 1983, esp. 84. He suggests that the south metopes were carved in three stages: the first twenty before 443, eight more (four with Kentauroomachy, four with the "intrusive" topic) in the last years of the 440s, and the final four early in the next decade. For Perikles' influence after 443, see also Wesenberg 1982, 112. For the latest information on the south metopes, see Mantis 1995 and 1997. Himmelmann 1979, esp. 170, believes all the south metopes to be the latest of the four sets on the temple, on stylistic and compositional grounds.

36. Perikles' influence from the beginning: Borbein 1989, esp. 106 n. 17 (contra Wesenberg). Anthropocentric philosophy on the frieze: Mark 1984; see also his review of Jenkins 1994 in *AJA* 100 (1996) 18990. Anaxagoras, as friend of Perikles: Plut. *Per.* 13.32; see Stewart 1990, 258 (T 47), and cf. p. 43, with some judicious comments. See also A. E. Raubitschek, "Pericles and Socrates," Abstract, *AJA* 100 (1996) 382. An equal input by Perikles would be apparent if the frieze glorifies the recent institution of a regular cavalry corps, as postulated by Pollitt 1997.

37. This quotation is taken from Bundgaard 1957, 96 and (the last sentence) n. 172; it is also cited by Altekamp 1991, in his discussion of plans and models: Section 6.8.23, pp. 24961. The Propylaia is said by Bundgaard, 100. cit., to have many points of similarity ("in its architectural details, in its proportions, and in all the other aesthetically crucial features") with the Parthenon, and the statement is therefore pertinent to our topic. See also Berger 1986, 78 (in the context of the Parthenon South metopes, 7898): "Man muss sich allerdings davon hüten, das Bildprogramm der Siidmetopen zu konkret mit den Zielen und Problemen des Perikles zu verbinden und die Auswahl der Mythen nurmehr als Botschaft der Athener an ihre Bundesgenossen zu verstehen." For Thoukydides and his bias, see Ober 1989, 89, and n. 86; see also his entire section on Perikles, pp. 869 . On the democratic process of selection for the Parthenon, see esp.

Himmelmann 1977, 8490; cf. Coulton 1983, 458.

38. Philippeion (after 338) as a Macedonian building: Miller (Collett) 1973. On Xanthos and Limyra (4th c.): Ridgway 1997, 7988, 9499. Ionic order as Athenian propaganda: Onians 1988, 1518; on more historical grounds: Connor 1993, esp. 204206; but see also McGowan 1997, esp. 23031 ns. 9799 (who suggests "monetary reasons") and cf. *supra*, ch. 2 n. 12.

39. It is therefore difficult to understand, even in a strictly Doric context, the statement that "temples receive more decoration only as scale decreases": P. B. F J. Broucke, "The Olympieion at Agrigento: New Observations and Interpretations," Abstract, *AJA* 99 (1995) 34041. For the Parthenon as "treasury," see *supra*, ch. 3 n. 16; cf. also Junker 1993, 108 and n. 630 with bibliography, and his entire approach to the Foce del Sele building (cf. *supra*, n. 32). Although the latter cannot be named a temple with certainty, the likelihood of this definition has increased since Mertens 1993, 30, has postulated the presence of carved metopes on the Paestan "Basilica," which is definitely a Heraion.

40. The Athenian Propylaia may have been meant to receive decoration, at least in the gables, but the structure was not finished, and what is extant (e.g., the cantilever device for weight distribution over the central span) does not support the theory (but see Dinsmoor 1950, 201, followed by Carpenter 1970, 79). Earlier propyla, moreover, both on the Akropolis and elsewhere (e.g., Sounion; Selinous, Malophoros sanctuary), do not carry sculpture. For later decorated examples (friezes, balustrades), at Epidaurus, Samothrake, and Pergamon, see supra, ch. 2 ns. 34, 44, 55, and Carpenter 1970; but gables seem to have remained empty (cf. Carpenter 1970, 201) until Roman Imperial times, when an occasional *imago clipeata*, usually of an emperor, occurs. Given the temple-like appearance of propyla, this distinction may be significant; perhaps it was meant

to emphasize their more public nature, as contrasted with the religious character of the cult building itself.

41. Pergamon "Altar": cf. ch. 2 n. 3. For the latest excavation report, see, e.g., the account by W. Radt, "Pergamon. Vorbericht über die Kampagne 1995," *AA* 1996, 44354, esp. 44647, also summarized in M.-H. Gates, "Archaeology in Turkey," *AJA* 101 (1997) 29092; the analysis of the foundation fill cannot narrow down the date of the structure more closely than the 185–160 B.C.E. range, although ca. 170 is preferred. For a discussion of both friezes and their political allusions, see Moreno 1994, 42978 (Gigantomachy), 47891 (Telephos), although I would object to some of his interpretations. Macedonian allusions would be, for instance, the star-burst emblem on a giant's shield on the east side; the personification of the river Brychon ("the Bellower") in the Chalkidike as the bull-giant on the south side. The Worksop torso from the same side, as Tithonus, would allude to Titus Quinctus Flamininus. In the Telephos frieze, the hind that, according to the myth, suckled the exposed in-

fant is replaced by a lioness, and the change has been explained as a Pergamene desire to upstage the Roman she-wolf of Romulus and Remus. The Italian scholar also suggests that Menekrates of Rhodes may have been the architect of the structure, as well as the adoptive father of some of the sculptors of the Gigantomachy; but Goodlett 1991, 673, states firmly that no solid literary or epigraphical evidence links Rhodes and Pergamon. On the Altar in general, see also Webb 1996, 6166, and now Kästner 1997.

Note that sculptors' signatures on the Gigantomachy blocks could be taken as indication of the growing importance of such masters, since architectural sculpture of earlier times was seldom signed; yet that other, perhaps practical/financial, explanations are possible is suggested by the partly preserved inscription, *Apollo [ . . . ] epo [iei]*, on a block of the chariot frieze that ran around the cella of the Mausolleion (or, according to Hoepfner 1996b, within the subterranean burial chamber), therefore in a high and inaccessible location that made it unreadable: Jeppesen 1992, 87, pl. 23.2

42. I thank Prof. Miller-Collett for letting me read the text of the still unpublished paper, "The Macedonians and Delphi in Classical and Hellenistic Times," that she delivered at the symposium on "Delphes, cent ans après. Essai de bilan," held at Delphi in 1992. Some scholars doubt that the robed and mitraed figure from the center of the west pediment is Dionysos, especially since he wears the costume of a kitharoidos (see bibliography in Ridgway 1990, 62 n. 6); yet Pausanias (1.2.5, in the context of the Athenian Kerameikos) calls Dionysos *Melpomenos*. See also supra, esp. n. io, for more information on the Apollonion at Delphi.

43. Private contribution to the Akropolis project: e.g., Coulton 1982, 20; Burford 1969, 84 n. 1, and cf. pp. 3536 (Delphi, 4th-c. temple, and other examples), 81 (Epidauros, panhellenic appeal). Tanagra temple: Roller 1989, 100108, no. 87, with original text and translation, and chronological discussion (the date given as probable is 230200). Hellenistic and 4th-c. donations: Gauthier 1985; Schaaf 1992; Lippstreu 1993; Bringmann and von Steuben 1995. Note the case of the Athenaion at Ilion, presumably built by the Macedonian Lysimachos (although the date is debated) but exhibiting a metopal pro-

gram influenced by Athens and Athena:  
Ridgway 1990, 15154, esp. 152; Webb 1996,  
4751.

A case comparable to the Tanagrean, albeit too late for our purposes, is that of the Temple of Aphrodite at Aphrodisias, whose peristyle was added in the Augustan period through contributions by private donors who could have their name inscribed on tablets affixed to the columns they had provided more or less like the stained-glass windows in a modern church. Some of the columns of the Archaic Heraion at Olympia bear similar cuttings for plaques, but these have usually been understood as dedication by women victors in the Heraia; given the different shape of the columns, betraying different dates, the plaques could also have been set up by individual donors (as maintained, e.g., by Dinsmoor 1950, 54 and n.2).

Archaic Temple of Apollo at Delphi: Herod. 2.180; 5.62 (= Stewart 1990, 250, T 33); Ridgway 1993, 29196, with recent bibliography. It could be argued that the Gigantomachy on the west pediment of the Apollonion was inspired by the Alkmeonids, in whose city the myth was especially popular. Yet I side with those who would consider the Delphic pediment in poros earlier than the one in marble (cf. my p. 295), and therefore attribute no external influence on the choice of subjects at the panhellenic sanctuary.

44. It has even been suggested that the friezes have the main purpose of enhancing the luxurious aspect of the treasury and are therefore, primarily, embellishment: cf. Knell 1990, 32; but see also his p. 35 where the Gigantomachy is connected with Delphi, once the seat of an oracle of Ge. Given the continuing veneration for all sacred spots at the site (note the Prologue of Aischylos' *Eumenides*, vv. 117 [Stewart 1990, 8788]), this explanation seems to me less valid than the recurrence of the theme on the Archaic Apollonion (the west pediment might have been already in place by 525). That the location of the Siphnian Treasury was too prominent to waste its advertising potential is stated by Brinckmann 1994, 117, who however, on the same grounds, is against a political and contingent interpretation of the intended message; his own reading of it (p. 118) may however be too general.

45. So-called Sikyonian metopes: Ridgway 1993, 33943 and n. 8.15, with full discussion of the problems involved; see also p. 343 and n. 8.27 for the suggestion of a slightly lower chronology, n. 8.23 for other authors in support of a Magna Graecian attribution. For a recent discussion in Sikyonian terms, see Knell 1990, 1823, esp. 1718 for a defense of Kleisthenic propaganda; he sees these metopes as one of the earliest examples of the use of myth for opposing purposes pro Sikyon and against Argos emphasizing the role of Apollo as both protector and punisher. For a different interpretation (the Monopteros meant to house "Kleobis and Biton" as the Dioskouroi), see Mertens-Horn 1996, with good comments on *spolia* and attribution. The official publication is Laroche and Nenna 1990, with list of recovered blocks on p. 264; see also n. 46, and p. 265, fig. 17a-b, for a corner triglyph found in the Roman agora. Mention of reused material all over the sanctuary: pp. 26668. Second-hand

blocks were found incorporated, e.g., within Treasuries V, VIII, the Athenian, XVII, XIX, XXIII, XXXI, even some terrace walls; the same pattern of reemployment can be observed at the Sanctuary of Athena Pronaia (Marmaria).

The material of the Monopteros comes from quarries located between Corinth and Sikyon, but Laroche and Nenna (p. 269) acknowledge that the same stone was used extensively throughout Delphi. Economic, logistic, and even aesthetic principles, rather than the ethnic origin of the dedicant, would have dictated what type of stone to use on individual buildings.

46. Olympia evidence: Herrmann 1976, esp. 32325. Lebadeia inscriptions: *IG VII*, 3073, Col. I, ll. 3637; 3074, 11. 1415; Choisy 1896, inscr. col. I, ll. 3233. For these epigraphical references I am indebted to Dr. M. Miles. All ancient sources on Lebadeia, and specifically those on the Temple of Zeus, have now been conveniently collected in Turner 1994, 264361; the inscriptions mentioned here are her nos. 263.12 and 263.6. Prof. Michael Jameson warns me, however, that the time clause on the removal of the blocks may simply have ensured that contractors replaced damaged blocks promptly; if they did not, they would lose the right to claim, and thus to reuse or sell elsewhere, the imperfect material.

The authorities issuing rules for the temple are Boiotarchs and Naopoioi, and it has therefore been suggested that there was at least federal involvement in its construction: L. A. Turner, "The Temple and Sanctuary of Zeus Basileus at Livadia," Abstract, *AJA* 96 (1992) 365; she believes that one of the latest building inscriptions dates from the 220s. The temple would therefore be earlier than 175 B.C.E., the date usually given to it on an alleged connection with Antiochos IV Epiphanes, for which no epigraphic or literary evidence exists. See also Turner 1994, 376421, for a more extensive discussion.

47. Donderer 1993; the list of Greek items is given in App. I, cols. 11522 (architecture in stone, including entire shrines), and App. II, cols. 12334 (architectural terracottas); for chronology, see col. 98; conclusions, cols. 11314. I do not find all examples equally convincing, but the principle is certainly correct, and the extension of the practice to the Etruscans and Romans makes the case stronger. Note that objects struck by lightning were ritually buried, often with inscriptions specifying the occurrence.
48. A. C. Smith, "Athenianizing Associations in the Sculptures of the Temple of Asklepios at Epidauros," Abstract, *AJA* 97 (1993) 300.
49. Canonical formula for pediments: see, e.g., Ridgway 1981, 42; see also p. 34 for comments on 5th-c. metopes.

## Conclusions

More questions than answers have been provided in the preceding discussions, yet a few points have emerged that can perhaps bear a final listing.

- (1) Greek architectural sculpture, in the sense of meaningful (whether symbolic or narrative) carving, included more than the traditionally accepted pediments, metopes, friezes, and akroteria. Such seemingly minor or non-figural details as antefixes, waterspouts, capitals, and moldings could carry specific messages when taken in their larger context.

(2) The traditionally accepted forms—pediments, metopes, friezes, akroteria—were not as widespread as usually believed. Decorated temples were rare compared to undecorated ones. Preference for certain types of architectural decorations varied with time and place, so that rough chronological and geographic patterns can be established. Some areas (e.g., the Kyklades) seem never to have had pedimental and metopal sculpture, despite their use of the Doric order and their acceptance of elaborate and narrative akroteria.<sup>1</sup> Yet, for this very rarity, sculpturally decorated buildings must have had specific importance and signaled specific messages.

(3) Types of buildings, as well as chronology, had a bearing on forms of architectural decoration. At first, only temples and treasuries carried figural sculpture, the latter in greater amounts than the former. Templelike façades, as in propyla and stoas with projecting wings, perhaps even paraskenia, remained unadorned except for akroteria. Gradually, tombs, especially of non-Greek rulers, appropriated the appearance of Greek

temples and used large amounts of carved embellishment. By the Hellenistic period, when the emphasis was on dynasties and powerful monarchs, the "traditional" forms were in decline but new forms had taken their place.e.g., the bronze statues on the Pharos at Alexandria and on the Tower of the Winds in Athens, which can no longer be recovered.

(4) Like literature and free-standing sculpture, Greek architecture and its decoration tended to "quote" famous precedents. Originality, as we understand it, was not a goal, or perhaps even a concept, of ancient masters. Beside tradition and imitation, other factors may have helped shape the sculptural themes of a building: local myths (and their manipulation), the impact of oral narrative and theatrical performances, influence from historico-political events and personalities. Yet the *primary* message was always of a religious nature, whatever its underlying meanings.

(5) Total visibility was not an essential consideration; neither was naturalism, at least in terms of coloration, which depended on vividness and contrast (often bipolarity), although it also served to unify and highlight compositions and patterns. Because of its quantity and location, usually preventing close inspection, architectural sculpture was not always first-rate and seems not to have engaged the best sculptors, although its carvers were always competent and enjoyed a certain amount of independence. Their names were not recorded by ancient sources, and, when preserved by building accounts and signatures, they are usually unknown.

A few words of warning for the modern observer may also be in order. It is important to remember that we read ancient sculptural messages as if they were an open book yet in most cases we have not broken their code. In addition, we place excessive reliance on the written sources, which are not only biased and selective but also, occasionally, erroneous whether intentionally or unintentionally, through faulty transcription of their own or of others. We tend to project our own experiences and contemporary concepts of brilliant masters and dominant political personalities on a culture that was not only different from ours but also from those of other ancient and contemporary peoples. Although political and historical implications of sculptural messages are not to be discounted, our problems in reaching uniform conclusions from the same evidence should alert us to the difficulty of the task.

There is too much we do not know, and too much that is missing from our material evidence for us to speculate on programs and circumstances. We overemphasize what has survived a pale ghost without paint and metal attachment—seven when it originally formed a mini-

mal part of a greater whole. We study pieces in isolation, divorced from the architectural and topographical contexts that gave them value beyond their own. Finally, in our starved desire for Greek originals, we romanticize and exaggerate the artistry and beauty of extant architectural sculpture—that is, of something that might occasionally have rated, in antiquity, at the level of a glorified molding.

It is not aesthetic value and carving virtuosity, therefore, that should make us want to study architectural sculpture although they certainly can be great and deservedly play their part in our interest in the subject but the message, which, whether properly or imperfectly perceived, we should nonetheless strive to recover. The symbolic importance of the Greek architectural vocabulary, whether we are aware of it or not, continues to surround us in our own constructions and sculptural embellishments. We too, like the ancients, live in a world of quotations, from the column capitals of our banks during the classical-revival period to Robert Venturi's 1992 "karyakids" at the Children's Museum in Houston (col. pl. 8). We should be conscious, and proud, of our inheritance.

## Note to Conclusions

1. A possible exception is an Archaic temple at Karthaia, on the island of Kea; its pedimental composition, however, if such it is, could be explained in terms of its location, very close to the Mainland and Athens. Its elaborate akroteria (cf. *supra*, ch. 5 n. 32) are nonetheless firm evidence. On the temple sculptures, see Ridgway 1993, 309, n. 7.7, with bibliography. The carved metope from Thera (*supra*, ch. 5 n. 27) remains so far unique.

## List of Maps and Illustrations

All maps, illustrations, figures, and color plates follow page 256.

### Maps

1. The ancient world
2. Southern Italy and Sicily
3. Greek mainland and western Peloponnesos
4. Greek Mainland (south-central) and eastern Peloponnesos
5. Kykladic Islands
6. Asia Minor, Anatolia, and Neighboring Islands

## Illustrations

1. Diagram of the Doric Order (after Berve and Gruben 1962)
2. Plan of Greek Temple and Diagram of the Ionic Order, Asiatic and Attic (after Lawrence 1957). Copyright © A. W. Lawrence 1957, 1962, 1967, 1973, 1983. New material copyright © R. A. Tomlinson 1983, 1996.
3. Profiles and decorations of the major Greek moldings (A: cyma recta above cavetto, decorated with palmette and lotus; B: ovolو above astragal, decorated with egg-and-dart above bead-and-reel; C: tainia, decorated with maeander; D: hawksbeak, decorated with tongue pattern [also called Doric leaf]; E: cyma reversa, decorated with Lesbian leaf)
4. Ephesos, Archaic Artemision. Elevation of west façade (after Krischen 1938)

5. Athens, Erechtheion (Temple of Athena Polias). Details of east façade (after Paton 1927, pl. 16)

6. Athens, Erechtheion (Temple of Athena Polias). Details of north porch (after Paton 1927, pl. 22)
7. Metapontion, Ionic temple. Detail of entablature (after Mertens 1979, fig. 3)
8. Akragas, Olympieion. Reconstructed elevation (after Marconi 1920)
9. Bassai, Temple of Apollo Epikourios. Interior of cella (after Krischen 1938)
10. Didyma, Temple of Apollo. Entablature of inner courtyard (after Wiegand and Knackfuss 1940)
11. Assos, Temple of Athena. Reconstruction of east façade (after Clark, Bacon, Koldewey 1902)
12. Xanthos, Nereid Monument. Reconstruction of west façade (after Childs and Demargne 1989)

13. Belevi Mausoleum. Reconstructed drawings of the best preserved coffers (after Praschniker et al., 1979)
14. Paestum, Temple of Athena. Restoration of east façade (after Krauss 1960). F. Krauss, Die Tempel von Paestum, DAA IX (1960), Abb. 44.
15. Magnesia, Temple of Artemis. Reconstruction of west façade (after Humann et al., 1904)
16. Delphi, Siphnian Treasury. Reconstruction of west façade (after Daux and Hansen 1987)
17. Argive Heraion, Second Temple of Hera. Sima (after Waldstein 1902, vol. 1 )
18. Olympia, Temple of Hera. Terracotta disk akroterion, section (after Yalouris 1971)
19. Epidauros, Temple of Asklepios. Reconstruction of akroterial and pedimental compositions: top: west; bottom: east (after Yalouris 1992)

20. Olympia, Temple of Zeus. West pediment, drawing of rear side (after Treu 1897)
21. Belevi Mausoleum. Reconstruction of north façade (after Hoepfner 1993). W. Hoepfner, AH 1993, Abb. 13 nach S. 120; 117 Abb. 9.
22. Halikarnassos Maussolleion. Reconstruction of south side (by K. Jeppesen)
23. Epidavros, Tholos. Reconstructed elevation (after Roux 1961)
24. Delphi, Siphnian Treasury. Reconstruction of east façade (after Daux and Hansen 1987)
25. Delphi, Siphnian Treasury. Reconstruction of north-west corner view (after Daux and Hansen 1987)
- 26a, b. Olympia, Temple of Zeus. Reconstruction of east façade and section through east porch (after Treu 1897)

27. Selinous, Temple E. Reconstructed sequence  
of metopes according to Marconi 1994

28. Athens, Parthenon. Section of east elevation  
(after Niemann 1875)
29. Athens, Parthenon. Diagram of spectators' viewpoints for best perception of west frieze  
(after Stillwell 1969). Courtesy American School of Classical Studies at Athens
30. Athens, Parthenon. Fractional views of the west frieze according to visitors' viewpoint (after Stillwell 1969). Courtesy American School of Classical Studies at Athens
31. Delphi, "Sikyonian Treasury." Reconstruction of metopes with ship Argo (after La Coste-Messelière 1936)
32. Foce del Sele, "Treasury" (or first Temple of Hera). Partial reconstruction of south side, west end (after Zancani Montuoro and Zanotti Bianco 1951)

33. Delos, Temple of the Athenians. Reconstruction of west and east façades (after *Delos* 34, 1984)
34. Limyra, Heroon of Perikle. Reconstruction of north façade (after Borchhardt 1976)
- 35a, b. Athens, Hekatomedon. Reconstruction of both pediments according to W. B. Dinsmoor's theories (drawing by K. Dimler)
36. Belevi Mausoleum. Reconstruction of the upper (Corinthian) entablature (after Hoepfner 1993). W. Hoepfner, AH 1993, Abb. 13 nach S. 120; 117 Abb. 9.
37. Trysa, Heroon. Plan with indication of sculptural topics (drawing by K. Dimler)
38. Corfu, Temple of Artemis. Restored drawing of pedimental composition according to E. Buschor (after Robertson, *Handbook of Greek Architecture* [Cambridge 1943], fig. 26)

39. Athens, Akropolis. Plan of Older Parthenon  
(solid lines) superimposed on plan of Parthenon  
(hatched lines) (after Hill 1912)

## List of Figures

### Figures

1. Alexander Sarcophagus, general view. Istanbul Museum (Photo postcard)
2. Alexander Sarcophagus, view of Battle side. Istanbul Museum (Photo postcard)
3. Athens, Erechtheion. Detail of column bases in north porch (Photo A. Frantz, Bryn Mawr College Collection)
4. Didyma, Hellenistic Temple of Apollo. Column base with Nereid and Triton (Photo B. S. Ridgway)

5. Didyma, Hellenistic Temple of Apollo.  
Column base with floral ornament (Photo B. S. Ridgway)
6. Athens, Erechtheion. South porch, detail of Karyatids and entablature (Photo Bryn Mawr College Collection)
7. Olympia, Temple of Zeus. Metope of the Apples of the Hesperides (Photo Alinari)
8. Didyma, Hellenistic Temple of Apollo. Sofa capital from courtyard (Photo B. S. Ridgway)
9. Didyma, Hellenistic Temple of Apollo. Sofa capital from courtyard (Photo B. S. Ridgway)
10. Athens, Erechtheion. Entablature of north porch (Photo Bryn Mawr College Collection)
11. Pergamon Altar. Ionic capital with thunderbolt. Berlin Museum (Photo by anonymous listener to Sather lectures)



12. Pergamon Altar. Reconstruction of west side in Berlin Museum (Photo postcard)
13. Athens, Erechtheion. Detail of anthemion molding (Photo Bryn Mawr College Collection)
14. Xanthos, Nereid Monument. East façade as presently reconstructed in London, British Museum (Photo postcard)
15. Delos, Stoa of Antigonos Gonatas. Detail of triglyph frieze (Photo B. S. Ridgway)
16. Morgantina, terracotta antefix depicting lion's skin (Photo courtesy H. A. Allen)
17. Delos, Temple of the Athenians. Central akroterion (east): Boreas kidnapping Oreithyia. Delos Museum (Photo B. S. Ridgway)

18. Delos, Temple of the Athenian. Lateral akroterion (east). Delos Museum (Photo B. S. Ridgway)
19. Delos, Temple of the Athenian. Central (west) akroterion: Eos kidnapping Kephalos. Delos Museum (Photo B. S. Ridgway)
20. Limyra, Heroon of Perikle. Central (north) akroterion: Perseus and Medousa. Antalya Museum (Photo B. S. Ridgway)
21. Limyra, Heroon of Perikle. Lateral (north) akroterion: sister of Medousa. Antalya Museum (Photo B. S. Ridgway)
22. Aigina, Temple of Aphaia. East pediment, falling warrior (Telamon's opponent), front view. Munich Glyptothek (Photo postcard)
23. Aigina, Temple of Aphaia. East pediment, falling warrior (Telamon's opponent), rear view. Munich Glyptothek (Photo postcard)

24. Himera, "Temple of Victory" (Athenaion).  
Lion-head waterspout from north side. Palermo  
Archaeological Museum (Photo E. F. Ferris)
25. Himera, "Temple of Victory" (Athenaion).  
Lion-head waterspout from north side. Palermo  
Archaeological Museum (Photo E. F. Ferris)
26. Himera, "Temple of Victory" (Athenaion).  
Lion-head waterspout from south side. Palermo  
Archaeological Museum (Photo E. F. Ferris)
27. Aigina, Temple of Aphaia. West pediment,  
head of central Athena showing holes for metal  
attachments (on ears and helmet). Munich Glypt-  
othek (Photo postcard)
28. Pergamon Altar, Gigantomachy Frieze. East  
side, panel with Zeus and Giants. Berlin Mu-  
seum (Photo postcard)
29. Limyra, Ptolemaion. Metope with Kentauro-  
macy. Antalya Museum (Photo B. S. Ridgway)

30. Limyra, Ptolemaion. Metope with Kentauro-machy. Antalya Museum (Photo B. S. Ridgway)

## List of Color Plates

### Color Plates

1. Athens, Parthenon, entablature. Reconstruction of color scheme by B. Loviot (envoi 1880) (Photo postcard)
2. Aigina, Temple of Aphaia. East pediment. Color reconstruction of group with fallen warrior, according to Furtwängler 1906 (Photo postcard)
3. Athens, Hekatomedon. So-called Bluebeard from pediment. Athens, National Museum (Photo M. Lang)
4. Lefkadia, Great (Judgment) Tomb. Reconstruction of façade (Photo postcard)

5. Athens, city. Monument of Lysikrates (Photo B. S. Ridgway)
6. Athens, Agora. Middle Stoa. Reconstruction of colors on entablature. (Photo postcard)
7. Corinth, Temple of Apollo. Hellenistic terra-cotta sima (Photo anonymous University of British Columbia graduate student)
8. Houston, Texas, Children's Museum, by Robert Venturi. Karyakids (Photo B. Lane)

## Bibliography

N.B.: My listing follows the standard abbreviations used by the *American Journal of Archaeology*, as listed in vol. 95 (1991) 416.

Åkerström, A. 1966. *Die architektonischen Terrakotten Kleinasiens*. Lund.

Albertson, F. C. 1990. "The Basilica Aemilia Frieze: Religion and Politics in Late Republican Rome." *Latomus* 49, 80115.

Allcott, J. V. 1986. *The Campus at Chapel Hill. Two Hundred Years of Architecture*. Chapel Hill Historical Society.

Altekamp, S. 1991. *Zu griechischer Architekturornamentik im sechsten und fünften Jahrhundert v. Chr. Exemplarische archäologische Auswertung der nichtdorischen Blattornamentik*. Frankfurt.

Amandry, P. 1988. "A propos de monuments de Delphes: Questions de chronologie (1)." *BCH* 112, 591-610.

Arafat, K. W. 1996. *Pausanias' Greece. Ancient Artists and Roman Rulers*. Cambridge.

Auberson, P. 1983. "Quand les temples grecs étaient polychromes." In *Couleur et architecture (IAS = Ingénieurs et architectes suisses)*, 109.23 [Nov. 10, 1983]), 42629.

Bal, M., and Bryson, N. 1991. "Semiotics and Art History." *ArtB* 73, 74208.

Balas, E. 1995. *Michelangelo's Medici Chapel*. Philadelphia.

Bammer, A. 1985. *Architektur und Gesellschaft in der Antike*. 2nd ed. Vienna.

Bammer, A., and Muss, U. 1996. *Das Artemision von Ephesos. Das Weltwunder Ioniens in archaischer und klassischer Zeit (AntW Sonderheft)*. Mainz.

Bankel, H. 1993. *Der spätarchaische Tempel der Aphaia auf Aegina*. Berlin and New York.

Barbanera, M. 1996. "Il significato della Gigantomachia sui templi greci in Sicilia." In L. Bacchielli and M. Bonanno Aravantinos, eds., *Scritti di An-*

*tichità in memoria di Sandro Stucchi* (Studi Miscellanei 29), vol. 2, 14953. Rome.

Barber, E. J. W. 1992. "The Peplos of Athena." In J. Neils, *Goddess and Polis: The Panathenaic Festival in Ancient Athens*, 10317, notes on pp. 20810. Hanover, New Hampshire, and Princeton. 1994. *Women's Work: The First 20,000 Years. Women, Cloth, and Society in Early Times*. New York.

Barletta, B.A. 1990. "An 'Ionian Sea' Style in Archaic Doric Architecture." *AJA* 94, 4572.

Barron, J. P. 1984. "Alkamenes at Olympia." *BICS* 31, 199211.

Bauer, H. 1977. "Lysikratesdenkmal, Baubestand und Rekonstruktion." *AM* 92, 20427.

- Berger, E. 1986. *Der Parthenon in Basel. Dokumentation zu den Metopen*. Studien der Skulpturhalle Basel 2. Mainz.
- , ed. 1984. *Parthenon-Kongress, Basel 1982*. 2 vols. Mainz.
- Berve, H., and Gruben, G. 1962. *Greek Temples, Theatres and Shrines*. New York.
- Betancourt, P. B. 1977. *The Aeolic Style in Architecture*. Princeton.
- Billot, M.-F. 1983. "Research in the eighteenth and nineteenth centuries on polychromy in Greek architecture." In *Paris-Rome-Athens* 1983, 61126.
1994. "Terres cuites architecturales, peintures et mosaïques aux Ve et IVe siècles." In Winter 1994, 138.

Bingöl, O. 1990a. "Der Oberbau des Smintheion in der Troas." In W. Hoepfner and E.-L. Schwandner, eds., *Hermogenes und die hochhellenistische Architektur*, 4550. Mainz.

1990b. "Überlegungen zum ionischen Gebälk." *IstMitt* 40, 101108.

Blinkenberg Hastrup, H. 1995. "Amazon or Barbarian? A Study of the 'Oriental' Amazons in Attic VasePainting from c. 550 B.C.400 B.C." (in Danish, with English Summary). *Klassisk Arkæologiske Studier* 2, 10116. Copenhagen.

Boardman, J. 1959. "Chian and Early Ionic architecture." *Antj* 39, 170218.

. 1972. "Herakles, Peisistratos and Sons." *RA*, 5772.

. 1975. "Herakles, Peisistratos and Eleusis." *JHS* 95, 112.

- . 1978. *Greek Sculpture. The Archaic Period.* London.
- . 1982. "Herakles, Theseus and Amazons." In D. Kurtz and B. Sparkes, eds., *The Eye of Greece. Studies in the Art of Athens* (Festschrift M. Robertson), 128. Cambridge.
- . 1985. *Greek Sculpture. The Classical Period.* London.
- . 1995. *Greek Sculpture: The Late Classical Period.* London.
- Boegehold, A. 1989. "A Signifying Gesture: Euripedes, Iphigenica Taurica, 96566." AJA 93, 8183.
- Bookidis, N. 1967. "A Study of the Use and Geographical Distribution of Architectural Sculpture in the Archaic Period (Greece, East Greece and Magna Graecia)." Ph.D. Dissertation, Bryn Mawr College. Ann Arbor Microfilms.

Borbein, A. H. 1989. "PhidiasFragen." In H.-U. Cain et al., eds., *Beiträge zur Ikonographie und Hermeneutik: Festschrift für Nikolaus Himmelmann* (Bjb BH 47), 99107. Mainz.

- Borchardt, L. 1897. *Die Aegyptische Pflanzenäule*. Berlin.
- Borchhardt, J. 1976. *Die Bauskulptur des Heroons von Limyra*. *IstForsch* 32. Tübingen.
- . 1990. "Das Heroon von Limyra." In *Götter, Heroen, Herrscher in Lykien*, 7578 and other entries, passim. Vienna and Munich.
- Boulter, P. N. 1969. "The Akroteria of the Nike Temple." *Hesperia* 38, 13340.
- . 1970. "The Frieze of the Erechtheion." *AntP* 10, 728.
- Bousquet, J. 1988. *Études sur le comptes de Delphes*. Paris.
- Bringmann, K., and von Steuben, H., eds. 1995. *Schenkungen hellenistischer Herrscher an griechische Städte und Heiligtümer*. Berlin.

Brinkmann, V. 1985. "Die aufgemalten Namenbeischriften am Nord und Ostfries des Siphnierschatzhauses." *BCH* 109, 77130.

. 1994. *Beobachtungen zum formalen Aufbau und zum Sinngehalt der Friese des Siphnierschatzhauses*. Munich.

Brommer, F. 1967. *Die Metopen des Parthenon*. Mainz.

. 1977. *Der Parthenonfries*. Mainz.

. 1980. "Plemochoe." *AA*, 54449.

Broneer, O. 1939. "The Head of Herakles in the Pediment of the Old Athena Temple." *Hesperia* 8, 91100.

Brouskari, M. 1989. "Aus dem Giebelschmuck des AthenaNike-Tempels." In H.-U. Cain et al., eds., *Beiträge zur Ikonographie und Hermeneutik: Festschrift für Nikolaus Himmelmann (Bjb BH 47)*, 11518. Mainz.

Brown, S. 1997. "'Ways of Seeing' Women in Antiquity: An Introduction to Feminism in Classical Archaeology and Ancient Art History." In A. O. Koloski-Ostrow and C. L. Lyons, eds., *Naked Truths: Women, Sexuality and Gender in Classical Art and Archaeology*, 1242. London.

Bruno, V. J. 1969. "Antecedents of the First Pompeian Style." *AJA* 73, 30517.

. 1981. "The Painted Metopes at Lefkadia and the Problem of Color in Doric Sculptured Metopes." *AJA* 85, 311.

. 1992. "Greek Painting Techniques in Roman Murals." In T. Hackens et al., eds., *The Age of Pyrrhus* (Archaeologia Transatlantica 11), 14773. Louvain.

Bundgaard, J. A. 1957. *Mnesicles, a Greek architect at work*. Copenhagen.

Burford, A. 1963. "The Builders of the Parthenon." In G. T. W. Hooker, ed., *Parthenos and Parthenon* (Suppl. to *Greece and Rome* 10), 2335.

. 1969. *The Greek Temple Builders at Epidauros: A social and economic study of building in the Askleopian sanctuary during the fourth and early third centuries B.C.* Liverpool and Toronto.

Büsing, H. 1990. "Zur Bemalung des Nike-Tempels." *AA*, 7176.

Cain, H.-U., and Dräger, O. 1994. "Die Marmorkandelaber." In *Das Wrack* 1994, 23957.

Capecchi, G. 1994. "Cariatide." *EAA Second Suppl.* 1971/1994, vol. 1 (ACARR), 88285.

Carpenter, J. R. 1970. "The Propylon in Greek and Hellenistic Architecture." Ph.D. Dissertation, University of Pennsylvania. Ann Arbor Microfilms.

Carpenter, R. 1962. *Greek Art: A Study of the Formal Evolution of Style*. Philadelphia.

- Carroll-Spillecke, M. 1985. *Landscape Depictions in Greek Relief Sculpture*. Frankfurt.
- Carter, J. C. 1975. *The Sculpture of Taras*. Philadelphia.
- . 1983. *The Sanctuary of Athena Polias at Priene*. London.
- Castriota, D. 1992. *Myth, Ethos, and Actuality: Official Art in Fifth Century B.C. Athens*. Madison.
- Catling, R. W. V. 1995. "Archaic Lakonian Architecture: The evidence of a temple model." *BSA* 90, 31724, pls. 3435.

Childs, W. A. P. 1993. "Herodotos, Archaic Chronology, and the Temple of Apollo at Delphi." *Jdl* 108, 399441. 1994. "The Date of the Old Temple of Athena on the Athenian Akropolis." In W. Coulson et al., eds., *The Archaeology of Athens and Attica under the Democracy* (Oxbow Monograph 37), 16. Oxford.

Childs, W. A. P., and Demargne, P. 1989. *Le Monument des Néréides. Le decor sculpté* (Fouilles de Xanthos 8). Paris.

Choisy, F. A. 1896. "Devis de Livadie." *BCH* 20, 32325.

Coarelli, E 1980. *Artisti e artigiani in Grecia. Guida storica e critica* (Universale Laterza 577): "Introduction," viixxx; "La posizione sociale dell'artista figurativo nella Grecia classica" (H. Lauter, from *Zur gesellschaftliche Stellung des bildenden Künstlers in der griechischen Klassik*, 1974) 10529; "La remunerazione dell'attività artistica nelle iscrizioni edilizie d'età classica" (N. Himmelmann, after "Zur Entlohnung künstlerischer Tätigkeit in klassischen Bauinschriften," *jdl* 94 [1979] 12742) 13152; "Gli artigiani della parola" (J. Svenbro, after *La parole et le marbre. Aux origines de la poétique grecque*, 1976, 17393) 20724; "Aspetti psicologici del lavoro nella Grecia antica" (J.-P. Vernant, after *Mythe et pensée chez le Grecs*, 1965, 21926) 22733. Bari.

Coles, W. A., ed. 1969. *Architecture and Society: Selected Essays of Henry Van Brunt*. Cambridge, Mass.

- Colvin, S. 1880. "On Representations of Centaurs in Greek Vase-Painting." *JHS* 1, 11618.
- Connelly, J. B. 1996. "Parthenon and *Parthenoi*: A Mythological Interpretation of the Parthenon Frieze." *AJA* 100, 5380.
- Connor, W. R. 1993. "The Ionian Era of Athenian Civic Identity." *ProcPhilSoc* 137, 194206.
- Conti, M. C. 1994. *Il più antico fregio dallo Heraion del Sele. Scultura architettonica e comunicazione visiva*. Florence.
- Cook, B. F. 1989. "The sculptors of the Mausoleum friezes." In T. Linders and P. Hellström, eds., *Architecture and Society in Hecatomnid Caria: Proceedings of the Upssala Symposium*, 987, 3142. Uppsala.
- Coulton, J. J. 1976. *The Architectural Development of the Greek Stoa*. Oxford.

- . 1982. *Ancient Greek Architects at Work: Problems of Structure and Design*. Ithaca.
- . 1983. "Greek Architects and the Transmission of Design." In *Architecture et Société de l'Archaïsme grec à la fin de la République romaine* (Actes du Colloque International, Rome 24 Dec. 1980), 45370. Paris and Rome.
- Cunningham, I. C. 1966. "Herodas 4." *CQ* n. s. 16, 11325.

- Curl, J. S. 1992. *Classical Architecture. An Introduction to its Vocabulary and Essentials, with a Select Glossary of Terms.* London.
- Danner, P. 1989. *Griechische Akrotere der archaischen und klassischen Zeit.* Rome.
- . 1993. "Figuren an Simaecken. Eine Form ostgriechischer Architekturdekoration im griechischen Westen." In Des Courtils and Moretti 1993, 25360.
- . 1994. "Ein architektonisches Terrakottafragment hellenistischer Zeit aus Reggio Calabria." In Winter 1994, 305308.
- Das Wrack.* 1994. G. Hellenkemper Salies, ed., et al. *Das Wrack, Der antike Schiffsfund von Mahdia.* Vols. 12. Cologne.
- Daux, G., and Hansen, E. 1987. *Le trésor de Siphnos. FdD 2.9.* Paris.

Davies, J. K. 1971. *Athenian Propertied Families*. Oxford.

Davies, P. J. E. 1997. "The Politics of Perpetuation: Trajan's Column and the Art of Commemoration." *AJA* 101, 4 65.

Day, J. W. 1989. "Rituals in stone: Early Greek epigrams and monuments." *JHS* 109, 1628.

De Bernardi Ferrero, D. 19661974. *Teatri Clasici in Asia Minore*. 4 vols. Rome.

De la Geniere, J., and Greco Maiuri, G. 1994. "Note sur le sanctuaire de Hera au Sele." *CRAI*, 30514.

Delivorrias, A. 1974. *Attische Giebelskulpturen und Akroteren des fiinften Jahrhunderts v. Chr.* (Tübinger Studien zur Archäologie und Kunstgeschichte, vol. 1). Tübingen.

- . 1994. "The Sculptures of the Parthenon." In Tournikiotis 1994, 98135.
- . 1997. "The Sculpted Decoration of the SoCalled Theseion: Old Answers, New Questions." In D. BuitronOliver, ed., *The Interpretation of Architectural Sculpture in Greece and Rome* (Studies in the History of Art 49, Symposium Papers XXIX), 84107. Washington, D.C.
- Demangel, P. 1932. *La frise ionique*. Paris.
- Demargne, P. 1973. "Le décor des sarcophages de Xanthos: Réalités, mythes, symboles." *CRAI*, 26269.
- Demargne, P., and Coupel, P. 1974. *Tombes-maisons, tombes rupestres et sarcophages* (Fouilles de Xanthos 5). Paris.
- Des Courtils, J., and Moretti, J.-C., eds. 1993. *Les grands ateliers d'architecture dans le mond égéen du IVe siecle av. J. C.* Paris.

Despinis, G. 1974.  
“ΤΑ ΓΛΥΠΤΑ ΤΩΝ ΑΕΤΟΜΑΤΩΝ ΤΟΥ ΝΑΟΥ ΤΗΣ  
**ΑΘΗΝΑΣ ΝΙΚΗΣ.**” *ArchDelt*,  
124, with German summary on pp. 27375.

.1986.  
“ΘΡΑΥΣΜΑΤΑ ΑΝΑΓΛΥΦΩΝ ΑΠΟ ΤΗ ΝΟΤΙΑ ΠΛΕΥΡΑ  
**ΤΗΣ ΑΚΡΟΠΟΛΗΣ.**” In H.  
Kyrieleis, ed., *Archaische und klassische griech-  
ische Plastik*, vol. 1, 17780, pls. 7576. Mainz.

De Waele, J. A. 1982. "I frontoni dell'Olympion  
agrigentino." In *Aparchai* (Festschrift P. Arias),  
27178. Pisa.

Dimitriou, P. 1947. "The Polychromy of Greek  
Sculpture: To the Beginning of the Hellenistic  
Period." Ph.D. Dissertation, Columbia  
University. Ann Arbor Microfilms.

Dinsmoor, W. B. 1941. *Observations on the Hephaisteion* (*Hesperia Suppl.* 5).

. 1950. *The Architecture of Ancient Greece*. London.

Donderer, M. 1993. "Irreversible Deponierung von Architekturteilen bei Griechen, Etruskern und Römern." *Öjh* 62, Beibl. cols. 93134.

Dörig, J. 1982.

"ΤΟ ΠΡΟΓΡΑΜΜΑ ΤΗΣ ΓΛΥΠΤΗΣ ΔΙΑΚΟΣΜΗΣΕΩΣ ΤΟΥ  
*ΠΑΡΘΕΝΩΝΑ.*" "ArchEph 121  
(publ. 1984) 187214.

Drerup, H. 1952. "Architektur und Toreutik in der griechischen Frühzeit." *Mdl* 5, 738.

Ehrhardt, W. 1989. "Der Torso Wien 1 328 und der Westgiebel des AthenaNike-Tempels auf der Akropolis in Athen." In *Beiträge zur Ikonographie und Hermeneutik: Festschrift für Nikolaus Himmelmann (BJb BH 47)*, 1 1927. Mainz.

. 1993. "Der Fries des Lysikratesmonument." *AntP* 22, 767.

Faustoferri, A. 1993. "The Throne of Apollo at Amyklai: Its Significance and Chronology." In O. Palagia and W. Coulson, eds., *Sculpture from Arcadia and Laconia* (Oxbow Monograph 30), 15966. Oxford.

. 1996. *Il trono di Amyklai e Sparta. Bathykles al servizio del potere* (Aucnus, Collana di Studi di Antichità dell'Istituto di Studi Comparati sulle Società Antiche, Università di Perugia, vol. 2.). Perugia.

Fedak, J. 1990. *Monumental Tombs of the Hellenistic Age: A Study of Selected Tombs from the PreClassical to the Early Imperial Era* (*Phoenix Suppl.* 27). Toronto.

Fehl, P. 1961. "The rocks on the Parthenon frieze." *J Warb* 24, 144.

Fehrentz, V. 1993. "Der antike Agyieus." *Jdl* 108, 12396.

Felten, F. 1984. *Griechische tektonische Friese archaischer und klassischer Zeit*. Waldsassen-Bayern.

Felten, F., and Hoffelner, K. 1987. "Die Relief-friese des Poseidontempels in Sunion." *AM* 102, 16984.

Finnestad, R. B. 1985. *Image of the World and Symbol of the Creator. On the Cosmological and Iconological Values of the Temple of Edfu*. Wiesbaden.

Fischer-Hansen, T. 1993. "Apulia and Etruria in the Early Hellenistic Period: A Survey." In *Aspects of Hellenism in Italy* (Acta Hyperborea 5), 5390.

Fleischer, R. 1983a. *Der Klagefrauensarkophag aus Sidon (IstForsch 34)*. Tübingen.

. 1983b. "Zu den trajanischen Elfenbeinfriesen aus Ephesos." *AA*, 53941.

Forsyth, I. H. 1993. *The Uses of Art: Medieval Metaphor in the Michigan Law Quadrangle*. Ann Arbor.

Frankfort, H. 1970. *The Art and Architecture of the Ancient Orient*. Pelican History of Art. 4th ed. Penguin Books.

Frazer, A. 1990. *Samothrace 10. The Propylon of Ptolemy II*. Princeton.

Freedberg, D. 1989. *The Power of Images: Studies in the History and Theory of Response*. Chicago.

Fullerton, M. D. 1997. "Imitation and intertextuality in Roman art." *JRA* 10, 42740.

Furtwängler, A. 1906. *Aegina. Das Heiligtum der Aphaia*. Munich.

Gadbery, L. M. 1988. "Three Fifth-Century B.C. Statue Bases from the Athenian Agora." Ph.D. Dissertation, Institute of Fine Arts, New York University.

- Galinski, K. 1992. *Classical and Modern Interactions: Post-modern Architecture, Multiculturalism, Decline, and Other Issues*. Austin, Texas.
- Garner, R. 1990. *From Homer to Tragedy. The Art of Allusion in Greek Poetry*. London and New York.
- Gauer, W. 1992. "Die Ephesischen Amazonen, das Bildnis des Artemon und der samische Krieg des Perikles." In H. Froning et al., eds., *Kotinos, Festschrift für Erika Simon*, 18898. Mainz.
- Gauthier, P. 1985. *Les cités grecques et leurs bienfaiteurs (IVe-Ier siècle a.J.-C.). Contribution à l'histoire des institutions (BCH Suppl. 12)*. Paris.
- GdDs. 1991. J. F. Bommelaer and D. Laroche, *Guide de Delphes. Le Site*. Paris.

Ginouvès, R. 1989. "Colonne et peristasis." In *Architecture et poésie dans le monde grec* (Festschrift G. Roux), 1317. Paris.

Ginouvès, R., and Martin, R. 1985. *Dictionnaire méthodique de l'architecture grecque et romaine*. Vol. 1: Materials, techniques of constructions and of decoration. Paris.

Ginouvès, R., et al. 1992. *Dictionnaire méthodique de l'architecture grecque et romaine*. Vol. 2: Elevations and interior arrangements. Paris.

Glowacki, K. 1995. "A New Fragment of the Erechtheion Frieze." *Hesperia* 64, 32531.

Goldberg, M. Y. 1982. "Archaic Greek Akroteria." *AJA* 86, 193217.

Goodlett, V. C. 1991 "Rhodian Sculpture Workshops." *AJA* 95, 66981.

Gruben, G. 1993. "Die inselionische Ordnung." In Des Courtils and Moretti 1993, 97109.

Grunauer, P. 1974. "Der Westgiebel des Zeustempels von Olympia. Die münchen Rekonstruktion, Aufbau und Ergebnisse." *Jdl* 89, 149.

. 1981. "Zur Ostansicht des Zeustempels." *OlBer* 10, 256301.

Gunter, A. C. 1995. *Labraunda, Swedish Excavations and Researches 2.5, Marble Sculpture*. Stockholm.

Habicht, Ch. 1985. *Pausanias' Guide to Ancient Greece*. Sather Classical Lectures 50. Berkeley.

Hall, E. 1989. *Inventing the Barbarian*. Oxford.

Hannestad, N. 1988. *Roman Art and Imperial Policy*. Aarhus.

- Hansen, E. 1947. *The Attalids of Pergamon*. Ithaca.
- Harris, D. 1995. *The Treasures of the Parthenon and Erechtheion*. Oxford.
- Harris, W. V. 1989. *Ancient Literacy*. Cambridge, Mass., and London.
- Harrison, E. B. 1965. *The Athenian Agora II. Archaic and Archaistic Sculpture*. Princeton.
- . 1981. "Motifs of the CitySiege on the Shield of Athena Parthenos." *AJA* 85, 281317, pls. 4654.
- . 1988. "'Theseum' East Frieze: Color Traces and Attachment Cuttings." *Hesperia* 57, 33949.
- . 1996a. "Pheidias." In O. Palagia and J. J. Pollitt, eds., *Personal Styles in Greek Sculpture*. Yale Classical Studies 30, 1665. Cambridge.

. 1996b. "The Web of History: A Conservative Reading of the Parthenon Frieze." In J. Neils, ed., *Worshipping Athena. Panathenaia and Parthenon*, 198214. Madison.

Hartog, F 1980. *Le miroir d'Hérodote*. Paris.

- Haselberger, L. 1983. "Bericht über die Arbeit am Jüngeren Apollontempel von Didyma." *1stMitt* 33, 90123, pls. 1226.
- . 1991. "Werkzeichnungen des Apollontempels III. Das antike Zeichenverfahren." After *Didyma Wegweiser* 23 (1986) in *AntW* 22, Sondernummer, 5960.
- Hearn, M. F. 1981. *Romanesque Sculpture: The Revival of Monumental Stone Sculpture in the Eleventh and Twelfth Centuries*. Ithaca.
- Hebert, B. 1989. *Schriftquellen zur hellenistischen Kunst. Plastik, Malerei und Kunsthandwerk der Griechen vom vierten bis zum zweiten Jahrhundert*. Horn.
- Heer, J. 1979. *La personnalité de Pausanias*. Paris.

- Heiden, J. 1995. *Die Tondächer von Olympia* (*OIForsch* 24). Berlin.
- Heimrich, H. 1994. "Die Chimärenkapitelle." In *Das Wrack* 1994, 20930.
- Hellmann, M.-C. 1983. "The *Envois de Rome* and Greek archaeology." In *Paris-Rome-Athens* 1983, 3942.
- . 1992. *Recherches sur le vocabulaire de l'architecture grecque, d'après les inscriptions de Délos* (BEFAR 278). Paris.
- Hellmann, M.-C., and Fraïse, Ph. 1983. "Greek Architecture and *Envois de Rome*: History and trends." In *Paris-Rome-Athens* 1983, 2538.
- Henig, M., ed. 1990. *Architecture and Architectural Sculpture in the Roman Empire*. Oxford University Committee for Archaeology, Monograph No. 29.

Hermary, A. 1984. *La sculpture archaïque et classique 1. Catalogue des sculptures classiques de Délos (Délos 34)*. Paris.

Herrmann, K. 1976. "Beobachtungen zur Schatzhaus-Architektur Olympias." In *Neue Forschungen in griechischen Heiligtümern*, 32150. Tübingen.

Hersey, G. 1988. *The Lost Meaning of Classical Architecture: Speculations on Ornament from Vitruvius to Venturi*. MIT Press, Cambridge, Mass.

Hiller von Gaertringen, E 1904. *Thera* 3. Berlin.

Himmelmann, N. 1977. "Phidias und die Parthenon-Skulpturen." In *Bonner Festgabe J. Straub (Bjb BH 39)*, 6790. Mainz.

. 1979. "Die zeitliche Stellung der Süd-Metopen am Parthenon." In *Stele* (volume in memory of N. Kontoleon), 16171. Athens.

- . 1988. "Planung und Verdingung der Parthenon-Skulpturen." In *Bathron. Beiträge zur Architektur und verwandten Kiinsten* (Festschrift H. D rerup), 21324. Saarbrücken.
- Hobsbawm, E., and Ranger, T. 1992. *The Invention of Tradition*. Cambridge.
- Hoepfner, W. 1993a. "Siegestempel und Siegesaltäre. Der Pergamonaltar als Siegesmonument." In Hoepfner and Zimmer 1993, 11125.
- . 1993b. "Zum Mausoleum von Belevi." *AA*, 11123.
- . 1996a. "Der vollendete Pergamonaltar." *AA*, 10430.
- . 1996b. "Zum Maussolleion von Halikarnassos." *AA*, 95114.

- . 1996c. "Zum Typus der Basileia und der königlichen Andrones." In Hoepfner and Brands 1996, 143.
- . 1997. "The Model of the Pergamon Altar." In *Pergamon* 2, 1997, 5867. Hoepfner, W., and Brands, G., eds. 1996. *Basileia. Die Paläste der hellenistischen Könige*. Internationalen Symposium in Berlin vom 16.12.1992 bis 20.12.1992. Mainz.

- Hoepfner, W., and Zimmer, G., eds. 1993. *Die griechische Polis. Architektur und Politik.* Schriften des Seminars für klassische Archäologie der Freien Universität Berlin.
- Holliday, P. J., ed. 1993. *Narrative and Event in Ancient Art.* Cambridge.
- Hommel, P. 1954. *Studien zu den römischen Figurengiebeln der Kaiserzeit.* Berlin.
- Hubner, G. 1994. "Ein archaisch Relief aus Paros." *AA*, 33548.
- Hurwit, J. 1977. "Image and Frame in Greek Art." *AJA* 81, 130.
- Isager, J. 1991. *Pliny on Art and Society.* London.

- Jameson, M. H. 1994. "The Ritual of the Athena Nike Parapet." In R. Osborne and S. Hornblower, eds., *Ritual, Finance, Politics. Athenian Democratic Accounts Presented to David Lewis*, 30724. Oxford.
- Jenkins, I. 1994. *The Parthenon Frieze*. London.
- . 1995. "The South Frieze of the Parthenon: Problems in Arrangement." *AJA* 99, 44556.
- Jeppesen, K. 1992. "*Tot operum opus*. Ergebnisse der danische Forschungen zum Maussolleion von Halikarnass seit 1966." *Jdl* 107, 59102.
- Junker, K. 1993. *Der ältere Tempel im Heraion am Sele. Verzierte Metopen in architektonischen Kontext*. Cologne, Weimar, Vienna.
- Kähler, H. 1949. *Das griechische Metopenbild*. Munich.

Kastner, V. 1990. "Scheibenförmige Akrotere in Griechenland und Italien." *Hesperia* 59, 25164.

. 1997. "The Architecture of the Great Altar and the Telephos Frieze." In *Pergamon* 2, 1997, 6882.

Katzenellenbogen, A. 1959. *The Sculptural Programs of Chartres Cathedral: Christ, Mary, Ecclesia*. Baltimore.

Kelly, N. 1995. "The Archaic Temple of Apollo at Bassai. Correspondences to the Classical Temple." *Hesperia* 64, 22777.

Kenfield, J. F. 1990. "An East Greek Master Coroplast at Late Archaic Morgantina." *Hesperia* 59, 270.

. 1993. "The Case for a Phokaian Presence at Morgantina as evidenced by the site's Archaic Architectural Terracottas." In Des Courtils and Moretti 1993, 26169.

Kienast, H. J. 1992. "Topographische Studien im Heraion von Samos." *AA*, 171213.

Kinney, D. 1995. "Rape or Restitution of the Past? Interpreting *Spolia*." In S.C. Scott, ed., *The Art of Interpreting* (Papers in Art History from the Pennsylvania State University, vol. IX, State College, Penn.), 5263.

Kjelberg, L., et al. 1940. *Larisa am Hermos*. 2. *Die architektonischen Terrakotten*. Stockholm.

Klein, N. L. 1991. "The Origin of the Doric Order on the Mainland of Greece. Form and Function of the Geison in the Archaic Period." Ph.D. Dissertation, Bryn Mawr College. Ann Arbor Microfilms.

Kleiner, F. S. 1972. "The Kalydonian Hunt: A Reconstruction of a Painting from the Circle of Polygnotos." *AntK* 15, 719.

Knell, H. 1983. "Dorische Ringhallentempel in spät- und nachklassischer Zeit." *Jdl* 98,20333.

- . 1990. *Mythos und Polis. Bildprogramme griechischer Bauskulptur.* Darmstadt.
- Koch, H. 1955. *Studien zum Theseustempel in Athen.* Berlin.
- Koenigs, W. 1972. "Kapitelle mit Lotusblüten an der 'Basilika' in Paestum." *AA*, 43840.
- Korres, M. 1984. "Der Pronaos und die Fenster des Parthenon." In E. Berger, ed., *Parthenon-Kongreß Basel. Referate und Berichte*, 4754. Mainz.
- . 1991. "Acropole, travaux de restauration du Parthénon." *BCH* 115, 83739.
- . 1994. "The Architecture of the Parthenon." In Tournikiotis 1994, 5497.

Kosmopoulou, A. 1996. "Greek Relief Bases for Statuary from the Archaic Period to the End of the Fourth Century B.C." Ph.D. Dissertation, Bryn Mawr College.

Koster, W. J. W. 1976. "Le temple d'Apollon à Delphes et l'Ion d'Euripide." In *Festoen* (Festschrift A. N. ZadoksJosephus Jitta, Scripta Arch. Groningana 6), 37382. Groningen.

Krauss, F. 1957. "Die Säulen des Zeustempels von Olympia." In E. Boehringer and W. Hoffmann, eds., *R. Boehringer, eine Freundesgabe*, 36587. Tübingen.

Kreeb, M. 1990. "Hermogenes-Quellen- und Datierungsprobleme." In W. Hoepfner and E.-L. Schwandner, eds., *Hermogenes und die hochhel lenistische Architektur*, 10315. Mainz.

Krumme, M. 1993. "Das Heiligtum der 'Athena beim Palladion' in Athen." *AA*, 21327.

- Kuhn, G. 1993. "Bau B und Tempel C in Thermos." *AM* 108, 2947.
- Kunze, C. 1996. "Die Skulpturenausstattung hellenistische Paläste." In Hoepfner and Brands 1996, 10929.
- Kyrialeis, H. 1988. "Bronzener Bauschmuck." In H. Büsing and F. Hiller, eds., *Bathron, Festschrift H. Drerup*, 27986. Saarbrücken.
- . 1997. "Zeus and Pelops in the East Pediment of the Temple of Zeus at Olympia." In D. Buitron-Oliver, ed., *The Interpretation of Architectural Sculpture in Greece and Rome* (Studies in the History of Art 49, Symposium Papers XXIX), 1227. Washington, D.C.
- La Coste-Messelière, P. de. 1936. *Au Musée de Delphes*. Paris.
- . 1957. *Sculptures du Trésor des Athéniens (FdD 4.4)*. Paris.

Lang, F. 1996. *Archaische Siedlungen in Griechenland: Struktur und Entwicklung*. Berlin.

Lange, K., and Hirmer, M. 1957. *Egypt: Architecture, Sculpture, Painting, in Three Thousand Years*. Phaidon.

Langlotz, E., and Hirmer, M. 1965. *Ancient Greek Sculpture of South Italy and Sicily*. Abrams, New York.

Lapalus, E. 1947. *Le fronton sculpté en Grèce*. Paris.

La Rocca, E. 1986. "Le sculture frontonali del tempio di Apollo Sosiano a Roma." In H. Kyrieleis, ed., *Archaische und Klassische griechische Plastik*, vol 2 (Akten des Internationalen Kolloquiums vom 22-25. April 1985 in Athen), 5157. Mainz.

- Laroche, D. 1992. "La Tholos de Delphes: Forme et Destination." In J.-F. Bommelaer, ed., *Delphes. Centenaire de la "Grande Fouille" réalisé par l'École Française d'Athènes (1892-1903)* (Acts of the Strasbourg Colloquium, 69 Nov. 1991), 20721. Leiden.
- Laroche, D., and Nenna, M.-D. 1990. "Le trésor de Sicyone et ses fondations." *BCH* 114, 24184.
- Lasserre, F., ed. 1969. *Strabon, Géographie*. Vol. 1. With G. Aujac, General Introduction and Book 1. Paris.
- , ed. 1978. *Strabon, Géographie*. Vol. 5. With R. Baladié, Book 8. Paris.
- Lattimore, S. 1974. "A Greek Pediment on a Roman Temple." *AJA* 78, 5561 (with "Addenda" in *AJA* 79 [1975] 37576).

- Launey, M. 1944. *Études Thasiennes I: Le sanctuaire et le culte d'Héraklès à Thasos*. Paris.
- Lauter, H. 1976. *Die Koren des Erechtheion* (*AntP* 6).
- . 1986. *Die Architektur des Hellenismus*. Darmstadt.
- Lehmann, Ph. W., et al. 1969. *Samothrace* 3. The Hieron. Princeton.
- Lehmann, Ph. W., and Spittle, D. 1982. *Samothrace* 5. *The Temenos*. Princeton.
- Leipen, N. 1971. *Athena Parthenos: A Reconstruction*. Toronto.
- Lerner, J. A. 1973. "A Painted Relief from Persepolis." *Archaeology* 26.2 (April) 11622.
- Lethaby, W. R. 1929. "The central part of the eastern frieze of the Parthenon." *HS* 49, 713.

Levi, P. 1971. *Pausanias. Guide to Greece*. Penguin Books.

Linfert, A. 1984. Review of Schmidt 1982. *Bjb* 184, 73033.

Lippstreu, J. 1993. "Antiochos IV. von Syrien und Eumenes II. von Pergamon als Architekturstifter." In Hoepfner and Zimmer 1993, 12633.

LloydMorgan, G. 1990. "Caryatids and other Supporters." In Henig 1990, 143511

Lullies, R., and Hirmer, M. 1962. *Greek Sculpture*. 2nd. ed. New York.

Lyttleton, M., and Blagg, T. 1990. "Sculpture in Nabatean Petra, and the Question of Roman Influence." In Henig 1990, 91117.

Madigan, B. B. 1992. *The Temple of Apollo Bassitas 2. The Sculpture*. Princeton.

Mantis, A. 19871990.

“ΤΟ ΑΝΑΓΛΥΦΟ ΤΟΥ ΜΟΥΣΕΙΟΥ ΘΑΣΟΥ, Λ 3255,

ΚΑΙ ΤΑ ΑΝΑΓΛΥΦΑ ΦΑΤΝΩΜΑΤΑ ΤΟΥ ΠΡΟΝΑΟΥ ΤΟΥ ΙΕΡΟΥ ΤΗΣ

**ΣΑΜΟΘΡΑΚΗΣ.**” In *Thrakike Epe-teris* (Volume in honor of G. Bakalakis' 80th Birthday), 15970. Komotini.

. 1988

“ΔΟΡΙΚΗ ΖΩΦΟΡΟΣ ΜΕ AMAZONOMAXEIA ΑΠΟ ΤΗ

**ΣΠΑΡΤΗ.**”

In *Praktika tou XII Di-ethnous Synedriou klasikes Archaiologias, Athenai 410 Sept. 1983.* Vol. 3, 17784, pl. 39 and line drawings in figs. 13. Athens.

.1995.

"ΝΕΑ ΕΥΡΗΜΑΤΑ. ΟΙ ΝΟΤΙΕΣ ΜΕΤΟΠΕΣ ΤΟΥ ΠΑΡΘΕ-

ΝΩΝΟΣ." "ΝΩΝΟΣ."

In *Proceedings of the 4th International Meeting for the Restoration of the Acropolis Monuments, Athens, 27-29 May 1994*, 3642. Athens.

. 1997. "Parthenon Central South Metopes: New Evidence." In D. Buitron-Oliver, ed., *The Interpretation of Architectural Sculpture in Greece and Rome* (Studies in the History of Art 49, Symposium Papers XXIX), 6681. Washington, D.C.

- Manzelli, V. 1994. *La policromia nella statuaria greca arcaica*. Rome.
- Marcadé, J. 1969. *Au Musée de Délos*. Paris.
- Marconi, C. 1994. *Le metope di Selinunte*. Rome.
- Mark, I. S. 1984. "The Gods on the East Frieze of the Parthenon." *Hesperia* 53, 289-342.
- Marquardt, N. 1994. "Die Reliefköpfe." In *Das Wrack* 1994, 329-37.
- Mauruschat, D. 1987. "Ein neuer Vorschlag zur Rekonstruktion der Schildamazonomachie der Athena Parthenos." *Boreas* 10, 32-58.
- McGowan, E. P. 1995. "Tomb Markers and Turning Post: Funerary Columns in the Archaic Period." *AJA* 99, 615-32.

. 1997. "The Origins of the Athenian Ionic Capital." *Hesperia* 66, 209-33.

Mekhitarian, A. 1954. *Egyptian Painting*. Skira Publications. Vol. 2. New York.

Meritt, L. S. 1996. "Athenian Ionic Capitals from the Athenian Agora." *Hesperia* 65, 121-74.

Mertens, D. 1979. "Der ionische Tempel von Metapont, ein Zwischenbericht." *RM* 86, 103-37.

. 1984. *Der Tempel von Segesta und die dorische Tempelbaukunst des griechischen Westens in klassischer Zeit*. Mainz.

. 1993. *Der alte Heratempel in Paestum und die archaische Baukunst in Unteritalien*. Mainz.

Mertens-Horn, M. 1986. "Studien zu griechischen Löwenbildern." *RM* 93, 1-61.

- . 1991. "Una nuova 'antefissa' a testa femminile da Akrai ed alcune considerazioni sulle ninfe di Sicilia." *BdA* 66, 9-28.
- . 1992. "Die archaische Baufriese aus Metapont." *RM* 99, 11-122.
- . 1996. "In der Obhut der Dioskuren. Zur Deutung des 'Monopteros der Sikyonier' in Delphi." *IstMitt* 46, 12 3-30.
- Meyer, H. 1987. "Ein neues Piräusrelief. Zur Überlieferung der Amazonomachie am Schild der Athena Parthenos." *AM* 102, 295-321.
- Miller (Collett), S. G. 1973. "The Philippeion and Macedonian Hellenistic Architecture." *AM* 88, 189-218.
- . 1993. *The Tomb of Lyson and Kallikles: A Painted Macedonian Tomb*. Mainz.

. 1994. "Architectural Terracottas from Ilion." In Winter 1994, 269-73.

Moore, M. B. 1979. "Lydos and the Gigantomachy." *AJA* 83, 79-99.

Moreno, P. 1994. *Scultura ellenistica*. Rome.

Moustaka, A. 1993. *Grossplastik aus Ton in Olympia (OlForsch 22)*. Berlin.

Muss, U. 1994. *Die Bauplastik des archaischen Artemisions von Ephesos*. Vienna.

Muss, U., and Müller-Kaspar, U. 1991-1992.  
"Was Rang oder Namen hat: Zu den Kopien antiker Skulpturen an der Fassade der Akademie der Bildenden Künste in Wien." *Öjh* 61, Beiblatt, cols. 277-308.

Mylonas, G. 1961. *Eleusis and the Eleusinian Mysteries*. Princeton.

Naso, A. 1996. *Architetture dipinte: Decorazioni parietali non figurate nelle tombe a camera dell'Etruria meridionale (VII-V sec. a.C.)*. Biblioteca archaeologica 18. Rome.

Neils, J. 1992. *Goddess and Polis: The Panathenaic Festival in Ancient Athens*. Hanover, New Hampshire, and Princeton.

Ober, J. 1989. *Mass and Elite in Democratic Athens: Rhetoric, Ideology, and the Power of the People*. Princeton.

Oberleitner, W. 1990. "Das Heroon von Trysa." In *Götter, Heroen, Herrscher in Lykien*, 7174, 5557 (entries nos. 4446), 16768 (entry no. 56). Vienna and Munich.

Ohnesorg, A. 1994. "Die Mittelakrotere des Peripteraltempels in Karthaia: Zur Rekonstruktion der Mittelakroterbasen." *AA*, 34954.

Onians, J. 1988. *Bearers of Meaning: The Classical Orders in Antiquity, the Middle Ages, and the Renaissance*. Princeton.

. 1990. "Quintilian and the Idea of Roman Art." In Henig 1990, 19.

. 1995. "The Strength of Columns and the Weakness of Theory." In S. C. Scott, ed., *The Art of Interpreting* (Papers in Art History from the Pennsylvania State University, vol. IX, State College, Penn.), 3051.

Orlandini, P. 1954. "Le nuove antefisse sileniche di Gela e il loro contributo alla coroplastica siceliota." *ArchCl* 6, 25166.

Osada, T. 1993. *Stilentwicklung hellenistischer Relieffriese*. Frankfurt.

Osborne, R. 1987. "The viewing and obscuring of the Parthenon frieze." *JHS* 107, 98105.

. 1994. "Framing the centaur: reading fifth-century architectural sculpture." In S. Goldhill and R. Osborne, eds., *Art and Text in Ancient Greek Culture*, 5284, notes on pp. 28991. Cambridge.

- Palagia, O. 1986.  
“ΔΥΟ ΘΡΑΥΣΜΑΤΑ ΚΛΑΣΣΙΚΗΣ ΓΛΥΠΤΙΚΗΣ.”  
In H. Kyrieleis, ed., *Archaische und klassische  
griechische Plastik*, vol. 2, 8688, pls. 10910.  
Mainz.
- . 1993a. "An Athena Promachos from the Acro-  
polis of Sparta." In O. Palagia and W. Coulson,  
eds., *Sculpture from Arcadia and Laconia*  
(Oxbow Monograph 30), 16775. Oxford.
- . 1993b. *The Pediments of the Parthenon*.  
Leiden.
- Papapostolou, I. A. 1993. "Thermon." *Ergon*,  
4458.
- Paris-Rome-Athens*. 1983. *Paris-Rome-Athens.  
Travels in Greece by French architects in the  
nineteenth and twentieth centuries*. Exhibition,  
École Nationale Supérieure des Beaux-Arts, Par-  
is 12 May 18 July 1982. English ed., Houston,  
Texas.

- Partridge, L. W. 1978. *John Galen Howard and the Berkeley Campus: BeauxArts Architecture in the 'Athens of the West.'* Berkeley.
- Pedersen, P. 1983. "Zwei ornamentierte Säulen-hälse aus Halikarnassos." *Jdl* 98, 87121.
- . 1989. *The Parthenon and the Origin of the Corinthian Capital.* Odense.
- Pelagatti, P. 1965. "Antefisse sileniche siceliote." *CronCatania* 4, 7998.
- Pergamon.* 1996. R. Dreyfus, and E. Schraudolf, eds., *Pergamon: The Telephos Frieze from the Great Altar.* Vol. 1. San Francisco.
- Pergamon* 2. 1997. R. Dreyfus, and E. Schraudolf, eds., *Pergamon: The Telephos Frieze from the Great Altar.* Vol. 2. San Francisco.

Petsas, Ph. M. 1966.

*O ΤΑΦΟΣ ΤΩΝ ΛΕΥΚΑΔΙΩΝ.*

Athens.

Pfaff, C. A. 1992. "The Argive Heraion: The Architecture of the Classical Temple of Hera." Ph.D. Dissertation, Institute of Fine Arts, New York University. Ann Arbor Microfilms.

Pfrommer, M. 1982. "Grossgriechischer und mittelitalischer Einfluss in der Rankenornamentik frühhellenistischer Zeit." *Jdl* 97, 11990.

Philipp, H. 1994.

"*XΑΛΚΟΙ ΤΥΧΟΙ—*  
*Eherne*

Wande." *AA*, 48998.

Plommer, H. 1979. "Vitruvius and the Origin of Caryatids." *JHS* 99, 97102.

Pollitt, J. J. 1974. *The Ancient View of Greek Art. Criticism, History, and Terminology*. Yale Publications in the History of Art 26. New Haven and London.

. 1986. *Art in the Hellenistic Age*. Cambridge.

. 1990. *The Art of Ancient Greece. Sources and Documents*. Cambridge.

- . 1995. "The *Canon* of Polykleitos and Other Canons." In W. G. Moon, ed., *Polykleitos, the Doryphoros, and Tradition*, 1924. Madison.
- . 1997. "The Meaning of the Parthenon frieze." In D. Buitron-Oliver, ed., *The Interpretation of Architectural Sculpture in Greece and Rome* (Studies in the History of Art 49, Symposium Papers XXIX), 5165. Washington, D.C.
- Posch, W. 1991. "Die  $\tau\acute{U}\pi\omega\iota$  des Timotheos." *AA*, 6973.
- . 1994. "Skenographia und Parthenon. Anmerkungen zur perspektiven Verkürzung." *AntK* 37, 2130.
- Praschniker, C., et al. 1979. *Das Mausoleum von Belevi (Forschungen in Ephesos 6)*. Vienna.
- Preißhofen, F. 1974. "Phidias-Daedalus auf dem Schild der Athena Parthenos?" *Jdl* 89, 5069.

- . 1984. "Zur Funktion des Parthenon nach den schriftlichen Quellen." In Berger 1984, 1518.
- Prifti, P. R. 1986. "Hellenic Colonies in Ancient Albania." *Archaeology* 39.4 (July/Aug.), 2631.
- Reade, J. E. 1979. "Assyrian Architectural Decoration: Techniques and Subject Matter." *BaM* 10, 1749.
- Reuterswärd, P. 1960. *Studien zur Polychromie der Plastik. Griechenland und Rom.* Stockholm.
- Rhodes, R. F. 1995. *Architecture and Meaning on the Athenian Akropolis.* Cambridge.
- Rhomaios, K. A. 1916.  
**“ΕΠΕΥΝΑΙ ΕΝ ΘΕΡΜΩ.”**  
*ArchDelt* 2, 17989.
- Ridgway, B.S. 1966. "Notes on the Development of the Greek Frieze." *Hesperia* 35, 88204.

- . 1970. *The Severe Style in Greek Sculpture*. Princeton.
- . 1977. *The Archaic Style in Greek Sculpture*. 1st ed. Princeton.
- . 1981. *Fifth Century Styles in Greek Sculpture*. Princeton.
- . 1982. "Court Art and Hellenistic Art: The Role of Alexander the Great." *ArchNews* 11.3/4, 4358.
- . 1983. "Painterly and Pictorial in Greek Relief Sculpture." In W. G. Moon, ed., *Ancient Greek Art and Iconography*, 193208. Madison.
- . 1985. "Late Archaic Sculpture." In C. G. Boulter, ed., *Greek Art: Archaic into Classical*, 317. Leiden.
- . 1989. "Parthenon and Parthenos." In N. Basgelen and M. Lugal, eds., *Festschrift für Jale Inan*, 295305. Istanbul (1991).

- . 1990. *Hellenistic Sculpture I: The Styles of ca. 331200 B.C.* Madison.
- . 1991. "Archaic Architectural Sculpture and Travel Myths." *Dialogues d'histoire ancienne* 17, 95112.

- . 1992. "Images of Athena on the Akropolis." In J. Neils, ed., *Goddess and Polis: The Panathenaic Festival in Ancient Athens*, 119142, notes on pp. 21015. Hanover, New Hampshire, and Princeton.
- . 1993. *The Archaic Style in Greek Sculpture*. 2nd expanded and revised ed. Chicago.
- . 1995a. "Lo stile severo. Lo stato della questione." In N. Bonacasa, ed., *Lo stile severo in Grecia e in Occidente. Aspetti e problemi* (Studi e materiali, Istituto di Archeologia, Università di Palermo, no. 9), 3542. Rome.
- . 1995b. "Peter J. Holliday, ed., *Narrative and Event in Ancient Art*. A Review Article." *CIBull* 71, 2628.
- . 1997. *Fourth Century Styles in Greek Sculpture*. Madison.

Riedel, N. 1993. "Zur Heratempel und Zeustempel in Olympia." In Hoepfner and Zimmer 1993, 8285.

Robertson, N. 1996. "Athena's Shrines and Festivals." In J. Neils, ed., *Worshipping Athena: Panathenaia and Parthenon*, 2777. Madison.

Rockwell, P. 1989. *Lavorare la pietra*. ICROM Publs. Urbino.

Rogers, L. A. 1974. *Relief Sculpture*. The Appreciation of the Arts 8. London.

Roller, D. W. 1989. *Tanagran Studies I. Sources and Documents on Tanagra in Boiotia*. Amsterdam.

Root, M. C. 1979. *The King and Kingship in Achaemenid Art: Essays on the Creation of an Iconography of Empire* (Acta Iranica 3). Leiden.

Rose, B. 1983. "Introduction." In *Paris-Rome-Athens* 1983, xiixxv.

Roux, G. 1961. *L'Architecture de l'Argolide aux IVème et IIIème siècles avant J.-C.* Paris.

. 1984. "Euripide témoin de Delphes." In E. Lucchesi and H. D. Saffrey, eds., *Mémorial André-Jean Festugière* (Cahiers d'Orientalisme 10), 3-12. Geneva.

Rowell, H. T. 1947. "The Original Form of Naevius' *Bellum Punicum*." *AJP* 68, 2146.

Rumscheid, E 1994. *Untersuchungen zur kleinasiatischen Bauornamentik des Hellenismus.* 2 vols. Mainz.

Rupp, D. M. 1974. "Greek Altars of the North-eastern Peloponnese, c. 750/725 B.C. to 300/275 B.C." Ph.D. Dissertation, Bryn Mawr College. Ann Arbor Microfilms.

- Rups, M. 1986. "Thesauros. A Study of the Treasury Building as Found in Greek Sanctuaries." Ph.D. Dissertation, Johns Hopkins University. Ann Arbor Microfilms.
- Rust, E. 1993. "Dorisch-Ionisch-Korinthisch." In Hoepfner and Zimmer 1993, 10210.
- Schaaf, H. 1992. *Untersuchungen zu Gebäudestiftungen in hellenistischer Zeit*. Cologne.
- Schädler, U. 1990. "Ionisches und Attisches am sogennanten Erechtheion in Athen." *AA*, 36178.
- . 1991. "Attizismen an ionischen Tempeln Kleinasiens." *IstMitt* 41, 265324
- Schark, R. 1996. "Zur Bezeichnung 'Korinthisches Kapitell.'" *AA*, 5359.
- Schattner, Th. 1996. "Architrav und Fries des archaischen Apollontempels von Didyma." *JdI* III, 123.



Schefold, K. 1968. *Der Alexander-Sarkophag.* Berlin.

Schiering, W. 1989. "Pyrrha auf Lesbos. Nachlese einer Grabung." *AA*, 341-77.

Schmidt, E. 1982. *Geschichte der Karyatide. Funktion und Bedeutung der menschlichen Träger- und Stützfigur in der Baukunst.* Beiträge zur Archäologie 13. Würzburg.

Schmidt-Colinet, A. 1977. *Antike Stützfiguren. Untersuchungen zu Typus und Bedeutung der menschengestaltigen Architekturstütze in der griechischen und römischen Kunst.* Frankfurt.

Schmidt-Dounas, B. 1994. "Der dorische Fries der Stoa des Antigonos Gonatas aus Delos." *AM* 109, 227-42.

Schmitt, R. 1992. *Handbuch zu den Tempeln der Griechen.* Frankfurt.

Schneider, R. M. 1986. *Bunte Barbaren*. Worms.

Scholl, A. 1995. “*XOHΦOPOI*: Zur Deutung der Korenhalle des Erechtheion.” *Jdl* 110, 179-212.

Scholz, L. 1965. "Architecture Alive on Campus: Erdman Hall." *Bryn Mawr Alumnae Bulletin* 46 (Fall 1965) 2-9.

Schrammen, J. 1906. *AvP* 3.1. *Der Grosze Altar. Der Obere Markt*. Berlin.

Schwab, K. A. 1996. "Parthenon East Metope XI: Herakles and the Gigantomachy." *AJA* 100, 81-90.

Scully, V. 1979. *The Earth, The Temple, and The Gods: Greek Sacred Architecture*. 2nd rev. ed. (1st ed. 1962). New Haven.

Seiler, F. 1986. *Die griechische Tholos*. Mainz.

Serwint, N. 1993. "The Female Athletic Costume at the Heraia and Prenuptial Initiation Rites." *AJA* 97, 403-22.

Settim, S. 1994. "Oralità e figura." Preface to Marconi 1994, 7-18.

Shapiro [Lapatinl, K.D. 1988.

"**ΥΜΝΩΝ ΘΗΣΑΥΡΟΣ:** Pindar's Sixth Pythian Ode and the Treasury of the Siphnians at Delphi." *MusHel*, 45, 1-5.

Shoe, L. 1949. "Dark Stone in Greek Architecture." *Hesperia Suppl.* 8, 341-52.

Simon, E. 1975. "Versuch einer Deutung der Südmetopen des Parthenon." *Jdl* 90, 100-20.

. 1980. "Die Mittelgruppe im Westgiebel des Parthenon." In *Tainia* (Festschrift R. Hampe, Berlin), 239-55.

Sinn, U. 1994. "Apollon und die Kentaurotomachie im Westgiebel des Zeustempel in Olympia." *AA*, 585-602.

Small, J. P., and Tatum, J. 1995. "Memory and the Study of Classical Antiquity." *Helios* 22, 149-77.

Smith, R. R. R. 1991. *Hellenistic Sculpture. A Handbook*. London.

Stadter, P. A. 1989. *A commentary on Plutarch's Pericles*. Chapel Hill and London.

Stähler, K. 1978. "Überlegungen zur architektonischen Gestalt des Pergamonaltares." In *Studien zur Religion und Kultur Kleinasiens* (Festschrift K. Dorner), 838-67. Leiden.

. 1992. *Griechische Geschichtbilder klassischer Zeit*. Eikon, vol. 1 Münster.

Stampolidis, N. 1987.

*O ΒΟΜΟΣ ΤΟΥ ΔΙΟΝΥΣΟΥ ΣΤΗΝ ΚΩ.*

Publications of the *ArchDelt*, vol. 34. Athens.

- Stern, E. M. 1985. "Die Kapitelle der Nordhalle des Erechtheions." *AM* 100, 40526.
- . 1988. "Glass and Gold in Classical Greek Architecture." In *Praktika tou XII Diethnous Synedriou klasikes archaiologias, 410 Sept. 1983*, vol. 3, 304308. Athens.
- Stewart, A. 1977. *Skopas of Paros*. Park Ridge.
- . 1983. "Pindaric *Dike* and the Temple of Zeus at Olympia." *CIAnt* 2, 13344.
- . 1985. "History, Myth, and Allegory in the Program of the Temple of Athena Nike, Athens." In *Pictorial Narrative in Antiquity and the Middle Ages* (Studies in the History of Art 16), 5373. Washington, D.C.
- . 1990. *Greek Sculpture: An Exploration*. New Haven and London.

- . 1993. *Faces of Power. Alexander's Image and Hellenistic Politics*. Berkeley.
- . 1996. "A Hero's Quest: Narrative and the Telephos Frieze." In *Pergamon* 1996, 3952.
- Stile severo*. 1990. *Lo stile severo in Sicilia. Dall'apogeo della tirannide alla prima democrazia*. Palermo.
- Stillwell, R. 1969. "The Panathenaic Frieze." *Hesperia* 38, 23141.
- Strong, D. 1973. "Septimius Severus at Lepcis Magna and Cyrene." *Society for Libyan Studies, Fourth Annual Report*. 197273, 273 5.
- Stupperich, R. 1990. "Zu den Stylopinakia am Tempel der Apollonis in Kyzikos." In E. Schwertheim, ed., *Mysische Studien* (Asia Minor Studien I), 101109. Bonn.

Sturgeon, M. C. 1977. "The Reliefs on the Theater of Dionysos in Athens." *AJA* 8, 1153.

Summers, D. 1994. "On the Histories of Artifacts." *ArtB* 76, 59092.

SvensonEvers, H. 1994. *Die griechischen Architekten archaischer und klassischer Zeit*. Frankfurt am Main.

Szeliga, G. N. 1977. "The Centauromachy at Pholoe in Architecture of the Archaic Period." Unpublished M.A. Thesis, Bryn Mawr College.

. 1981. "The Dioskouroi on the Roof: Archaic and Classical Equestrian Akroteria in Sicily and South Italy." Ph.D. Dissertation, Bryn Mawr College. Ann Arbor Microfilms.

Tancke, K. 1989. *Figuralkassetten griechischer und römischer Steindecken*. Frankfurt.

- Tersini, N. D. 1987. "Unifying Themes in the Temple of Zeus at Olympia." *ClAnt* 6,13959.
- Themelis, P. 1992. "The Cult Scene on the Polos of the Siphnian Karyatid at Delphi." In R. Hägg, ed., *The Iconography of Greek Cult in the Archaic and Classical Periods*, 4972. Athens and Liege.
- . 1994. "Hellenistic Architectural Terracottas from Messene." In Winter 1994, 14169.
- Thompson, H. A. 1963. Review of V. Scully, *The Earth, the Temple, and the Gods*, in *ArtB* 45, 27780.
- . 1984. "The Athenian Vase-Painters and Their Neighbors." In P. M. Rice, ed., *Pots and Potters* (UCLA Institute of Archaeology, Monograph 24) 719.

- Thompson, H. A., and Wycherley, R. E. 1972. *The Athenian Agora 14: The Agora of Athens*. Princeton.
- Touloupa, E. 1983.  
*ΤΑ ΕΝΑΕΤΙΑ ΓΛΥΠΤΑ ΤΟΥ ΝΑΟΥ ΑΠΟΛΛΩΝΟΣ ΔΑΦΝΗΦΟΡΟΥ ΣΤΗΝ ΕΠΕΤΡΙΑ*. Thessaloniki.
- Tournikiotis, P., ed. 1994. *The Parthenon and Its Impact in Modern Times*. Athens.
- Townsend, R. F. 1995. *The Athenian Agora 27: The East Side of the Agora. The Remains beneath the Stoa of Attalos*. Princeton.
- Treu, G. 1895. "Die technische Herstellung und Bemalung der Giebelgruppen am Olympischen Zeustempel." *Jdl* 10, 135.

. 1897. *Die Bildwerke in Stein und Thon*. In E. Curtius and F. Adler, eds., *Olympia* 3. Berlin.

Trianti, I. 1986.

“Ο ΓΛΥΠΤΟΣ ΔΙΑΚΟΣΜΟΣ ΤΟΥ ΝΑΟΥ ΣΤΟ ΜΑΖΙ ΤΗΣ ΕΛΕΙΑΣ.”

In H. Kyrieleis, ed., *Archaische und klassische griechische Plastik*, vol. 2, 15568. Mainz.

. 1995

“ΝΕΩΤΕΡΑ ΓΙΑ ΤΙΣ ΜΕΤΟΠΕΣ ΜΕΤΟΠΕΣ ΤΟΥ ΠΑΡΘΕΝΩΝΟΣ.”

In *Proceedings of the 4th International Meeting for the Restoration of the Acropolis Monuments, Athens, 2729 May 1994*, 4246. Athens.

Tudor, H. 1972. *Political Myth*. London.

Turner, L. A. 1994. "The History, Monuments and Topography of Ancient Lebadeia in Boeotia, Greece." Ph.D. Dissertation, University of Pennsylvania. Ann Arbor Microfilm no. 9427631.

Tyrrell, W. B. 1984. *Amazons: A Study in Athenian Mythology*. Baltimore.

Uz, D. M. 1990. "The Temple of Dionysos at Teos." In W. Hoepfner and E.-L. Schwandner, eds., *Hermogenes und die hochhellenistische Architektur*, 5161. Mainz.

Van Zanten, D. 1994. "The Parthenon Imagined Painted." In Tournikiotis 1994, 25877.

Vickers, M. 1985. "Persepolis, Vitruvius and the Erechtheum Caryatids: The iconography of medism and servitude." *RA*, 328.

von Eickstedt, K.-V. 1994. "Bemerkungen zur Ikonographie des Frieses vom Ilissos-Tempel." In W. Coulson et al., eds., *The Archaeology of Athens and Attica under the Democracy* (Oxbow Monograph 37), 10511. Oxford.

von Graeve, V. 1970. *Der Alexandersarkophag und seine Werkstatt* (*IstForsch* 28). Tübingen.

. 1987. "Eine Miszelle zur griechischen Malerei." *IstMitt* 37, 13144.

von Hesberg, H. 1983. "Zur Datierung der Gefangenenauffassade in Korinth. Eine wiederverwendete Architektur augusteischer Zeit." *AM* 98, 21538.

von Mercklin, A. 1962. *Antike Figuralkapitelle*. Berlin.

- Walter-Karydi, E. 1986. "Prinzipien der archaischen Farbgebung." In K. Braun and A. Furtwängler, eds., *Studien zur klassischen Archäologie* (Festschrift F. Hiller), 2341. Saarbrücken.
- . 1994. "Zur Rekonstruktion der Mittelakrotergruppen." *AA*, 35464.
- Watrous, L. V. 1982. "The Sculptural Program of the Siphnian Treasury at Delphi." *AJA* 86, 15972.
- Webb, P. A. 1996. *Hellenistic Architectural Sculpture: Figural Motifs in Western Anatolia and the Aegean Islands*. Madison.

- Wegener, S. 1985. *Funktion und Bedeutung landschaftlicher Elemente in der griechischen Reliefkunst archaischer bis hellenistischer Zeit.* Frankfurt.
- Werbrouck, M. 1949. *Le temple d'Hatshepsout à Deir el Bahari.* Brussels.
- Wescoat, B. D. 1995. "Wining and Dining on the Temple of Athena at Assos." In S. C. Scott, ed., *The Art of Interpreting* (Papers in Art History from the Pennsylvania State University, vol. IX, State College, Penn.), 292320.
- Wesenberg, B. 1982. "Wer erbaute den Parthenon?" *AM* 97, 99125.
- . 1983. "Parthenongebälk und Südmetopenproblem." *Jdl* 98, 5786.

- . 1984. "Die Kopien der Erechtheionkoren und die Frauen von Karyai." *Jdl* 99, 17285 (Within article: "Augustusforum und Akropolis," 16185.)
- . 1985. "Kunst und Lohn am Erechtheion." *AA*, 5565.
- . 1995. "Panathenaische Peplosdedikation und Arrhephorie. Zur Thematik des Parthenonfries." *JdI* 110, 14978.

Wester, U. 1969. *Die Akroterfiguren des Tempels der Athener auf Delos*. Heidelberg.

Wiegand, Th. 1904. *Die archaische Poros-Architektur der Akropolis zu Athen*. Cassel.

Wilson, R. J. A. 1990. "Roman Architecture in a Greek World: The Example of Sicily." In Henig 1990, 6790.

Winnefeld, H. 1910. *AvP* 3.2. *Die Friese des groszen Altars*. Berlin.

Winter, N. A. 1978. "Archaic Architectural Terracottas decorated with Human Heads." *RM* 85, 2758.

.. 1993. *Greek Architectural Terracottas. From the Prehistoric to the End of the Archaic Period.* Oxford.

, ed. 1994. *Greek Architectural Terracottas of the Classical and Hellenistic Periods (Dec. 12-15 1991) (Hesperia Suppl. 27).*

Yalouris, N. 1970.

"Ο ΕΝ ΒΑΣΣΑΙΣ ΦΙΓΑΛΕΙΑΣ ΝΑΟΣ ΤΟΥ ΕΠΙ-  
**KΟΥΡΕΙΟΥ ΑΠΟΛΛΩΝΟΣ.**"

*Olympiaka Chronika* 1, 93110.

. 1972. "Das Akroter des Heraions in Olympia." *AM* 87, 8595.

. 1984. "Das Ketos des Parthenon-Westgiebels." In Berger 1984, 28183, pls. 2829.

. 1992. *Die Skulpturen des Asklepiostempels in Epidauros* (*AntP* 22). Munich.

Yavis, C. G. 1949. *Greek Altars*. St. Louis.

Younger, J. G. 1997. "Gender and Sexuality in the Parthenon Frieze." In A. O. Koloski-Ostrow and C. L. Lyons, eds., *Naked Truths: Women, Sexuality and Gender in Classical Art and Archaeology*, 12053. London.

Zancani Montuoro, P., and Zanotti Bianco, U. 1951. *Heraion alla Foce del Sele*. Vol. 1. Rome.

Zanker, P. 1997. "In Search of the Roman Viewer." In D. Buitron-Oliver, ed., *The Interpretation of Architectural Sculpture in Greece and Rome* (Studies in the History of Art 49, Symposium Papers XXIX), 17991. Washington, D.C.

Zeitlin, F. 1994. "The Artful Eye: Vision, Ecphrasis and Spectacle in Euripidean Theater." In S. Goldhill and R. Osborne, eds., *Art and Text in Ancient Greek Culture*, 13896 and notes on pp. 295304. Cambridge.

# Maps



### Map 1. The ancient world.



Map 2.  
Southern Italy and Sicily.







Map 3.  
Greek mainland and western Peloponnesos.



Map 4.

Greek mainland (south-central) and eastern Peloponnesos.



Map 5.  
Kykladic Islands.



Map 6.  
Asia Minor, Anatolia, and neighboring islands.



# Illustrations

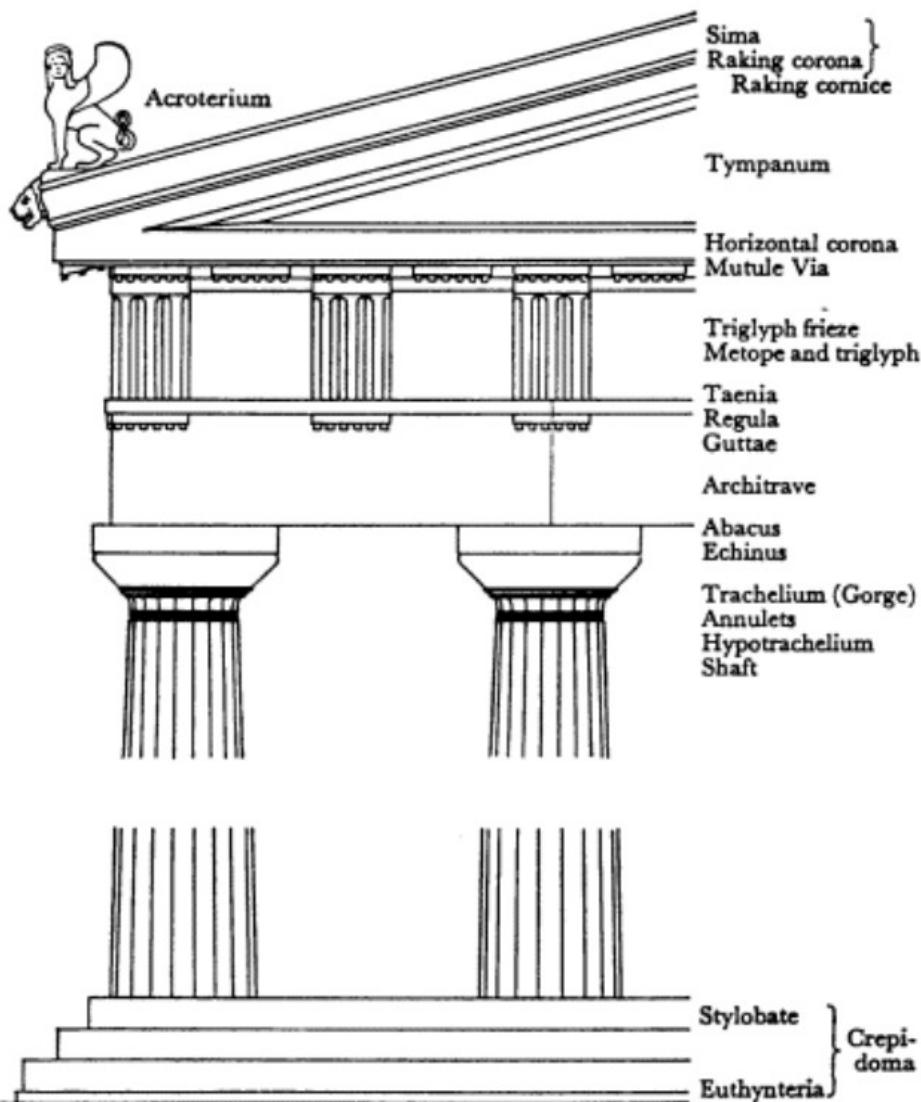


Illustration 1.  
Diagram of the Doric Order.





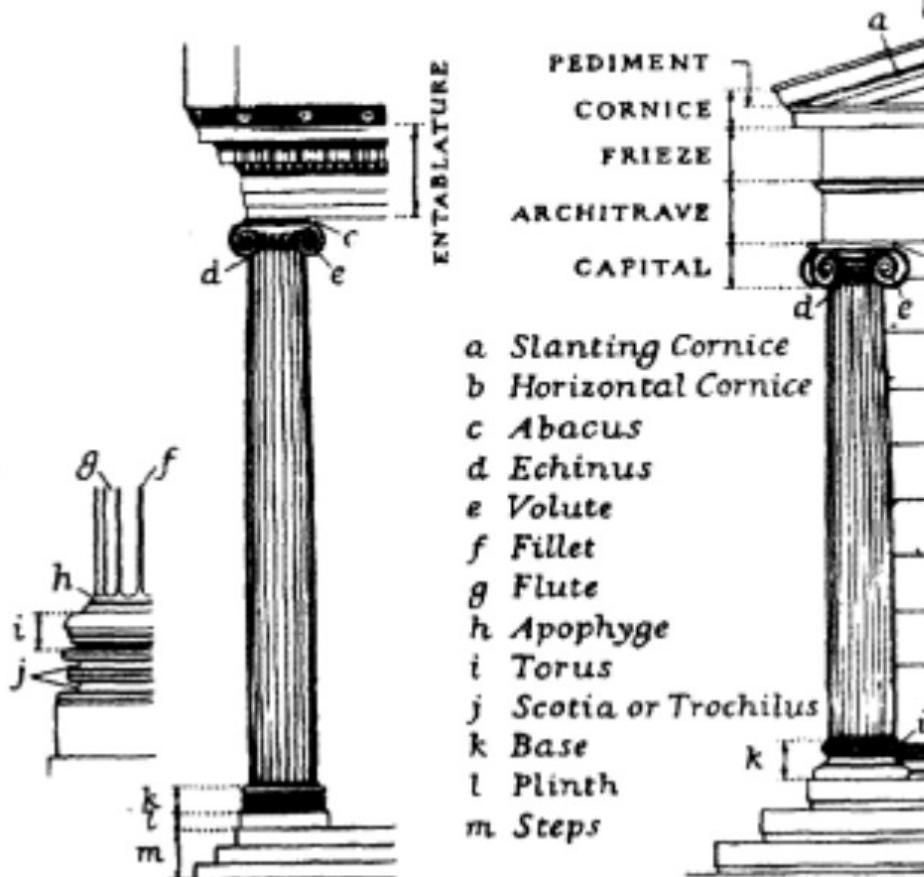
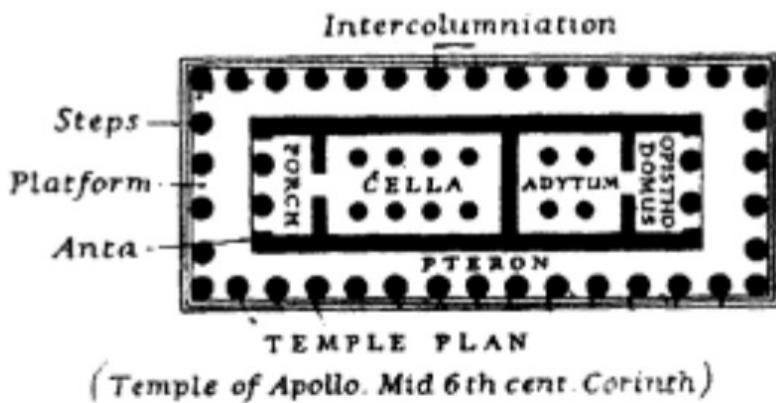
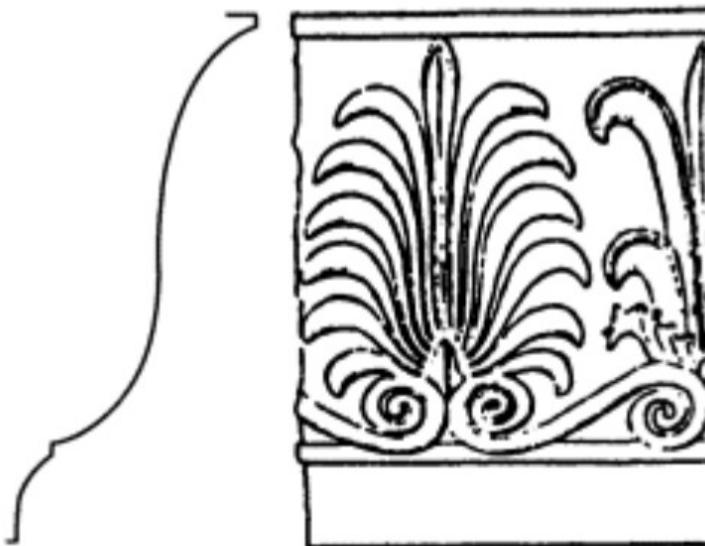


Illustration 2.  
Plan of Greek Temple and Diagram of the Ionic Order, Asiatic





A



B



C

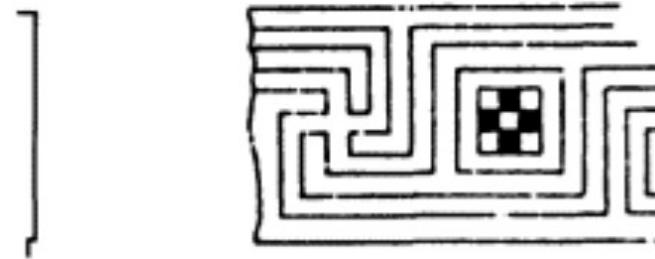


Illustration 3.

Profiles and decorations of the major Greek moldings (A: cavetto, decorated with palmette and lotus; B: ovolو above with egg-and-dart above head-and-reel; C: tainia, decorated hawksbeak, decorated with tongue pattern [also called Doric decorated with lesbian leaf]).





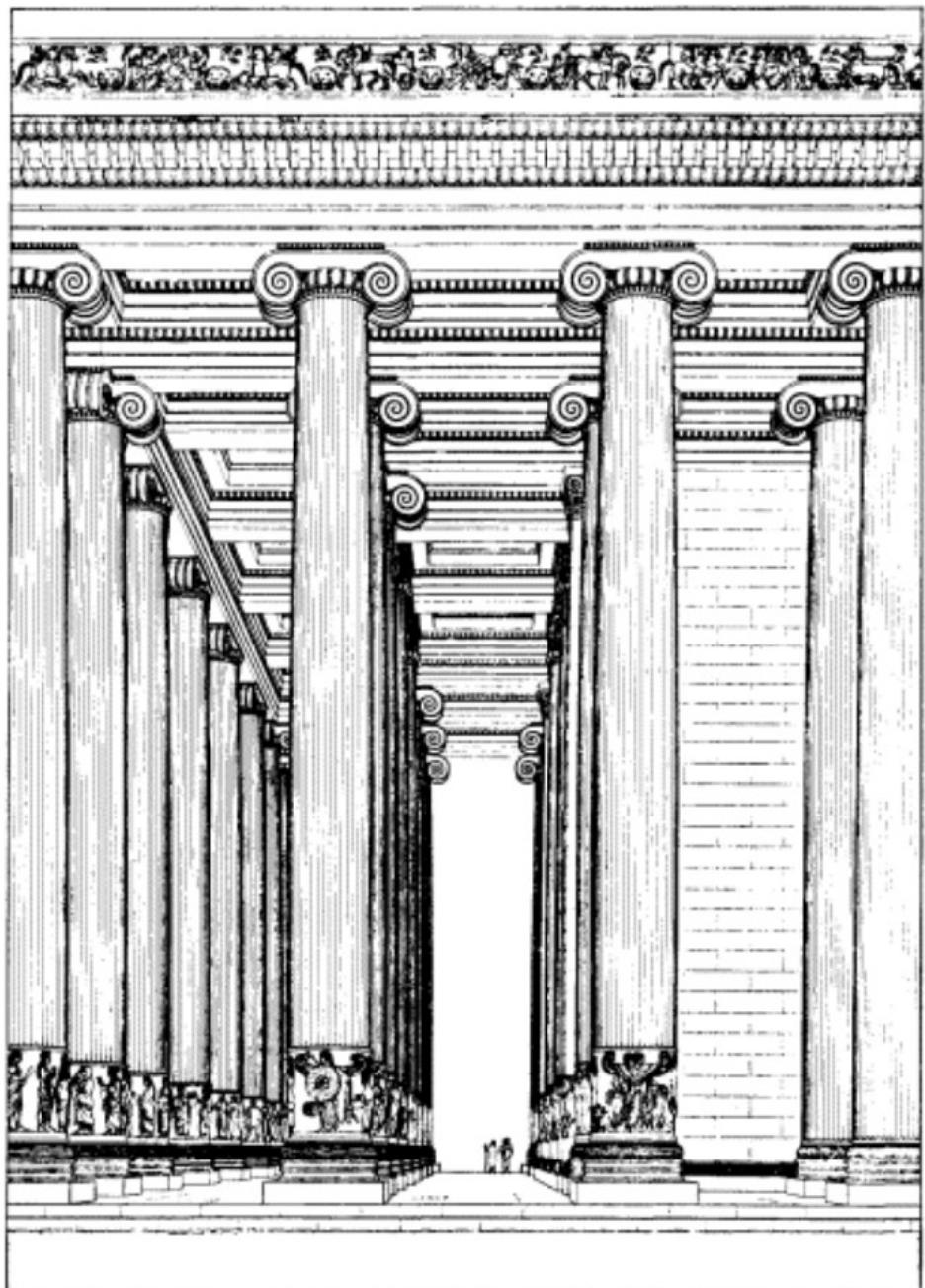


Illustration 4.  
Ephesos, Archaic Artemision. Elevation of west façade.





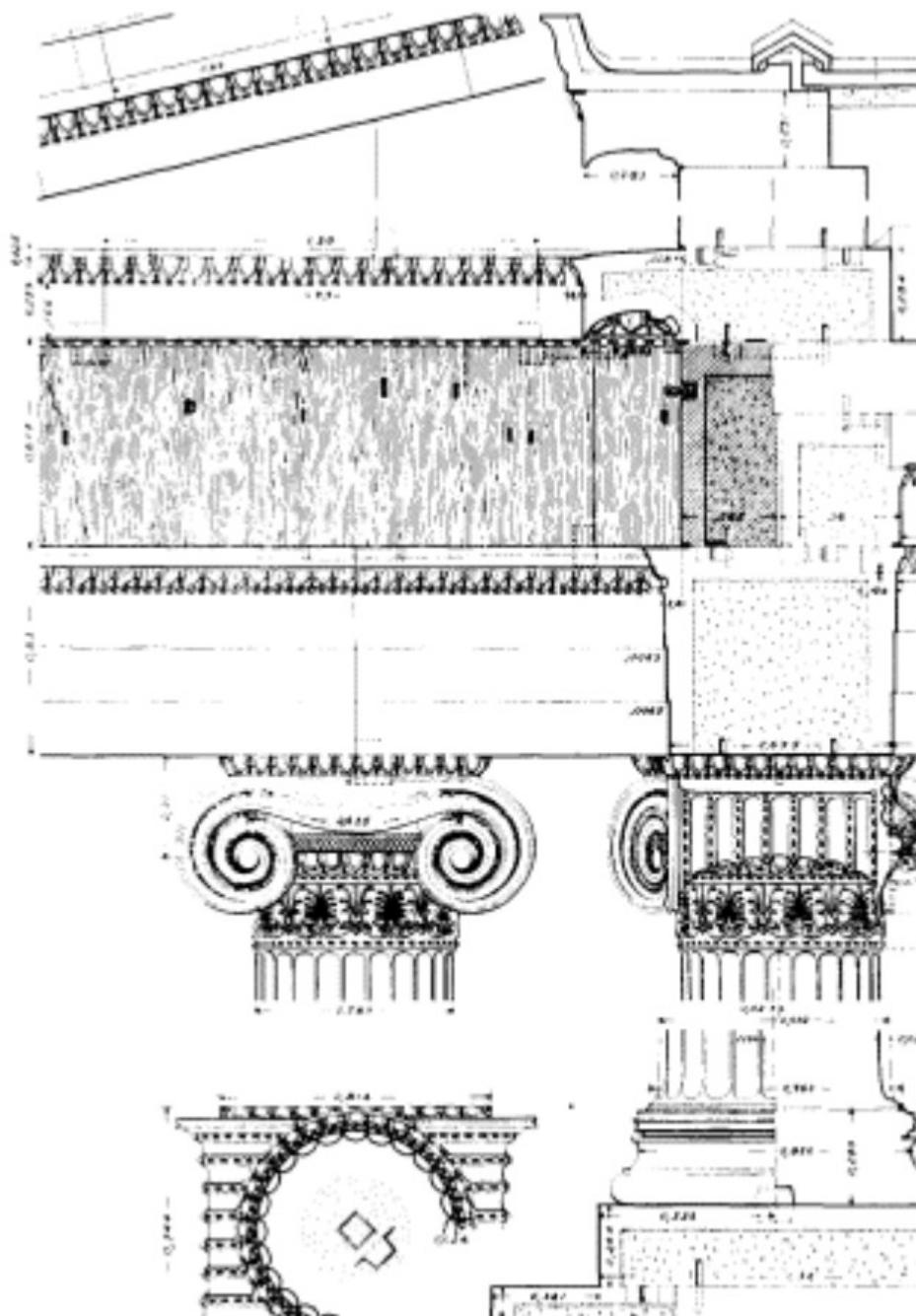


Illustration 5.

Athens, Erechtheion (Temple of Athena Polias). Details of the undecorated upper torus of the base and the solid eyes of the volutes in the capital.





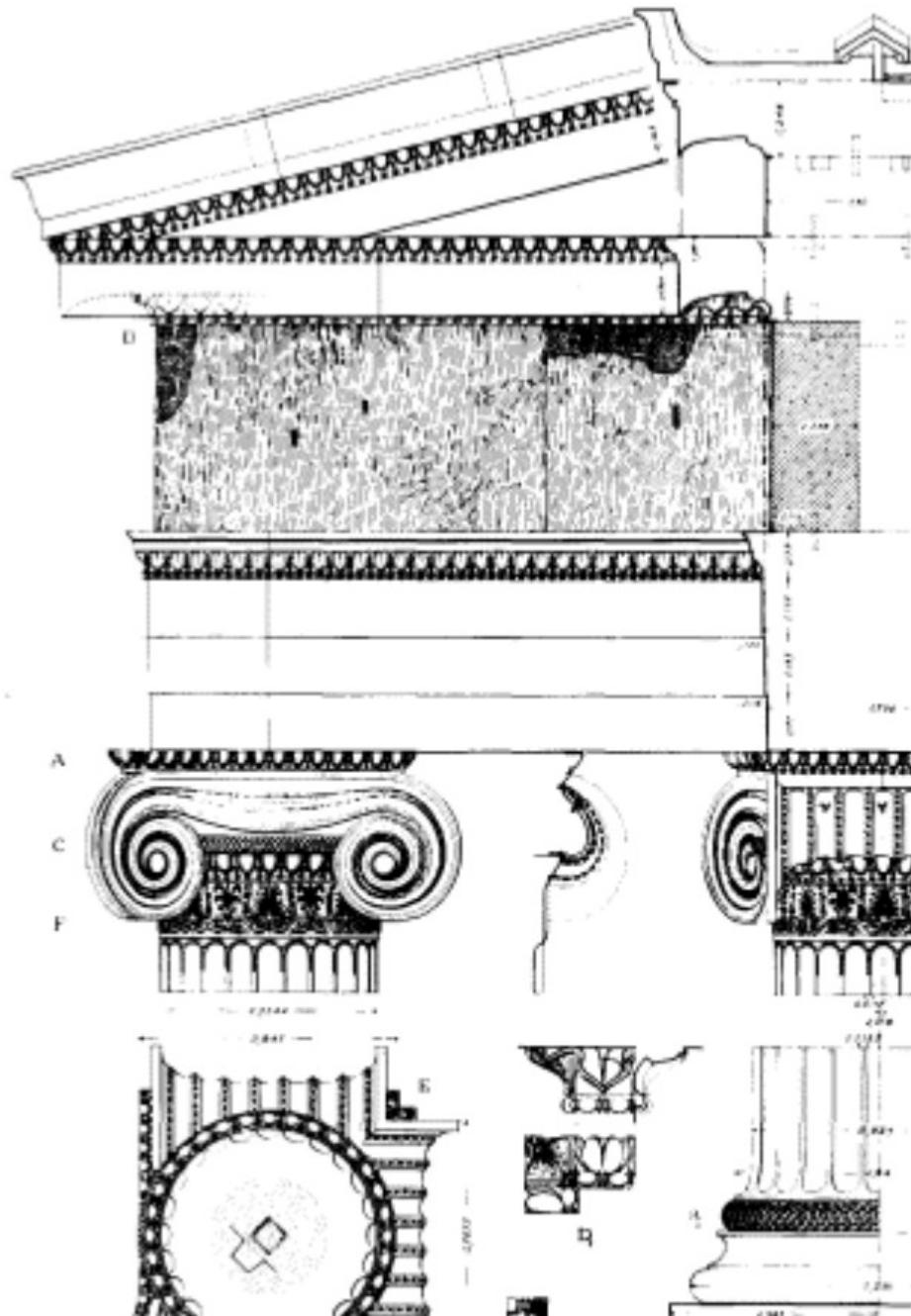


Illustration 6.

Athens, Erechtheion (Temple of Athena Polias). Details of no  
the hollow eyes of the guilloche below the volutes in the ca  
guilloche on the upper torus of the base (two type

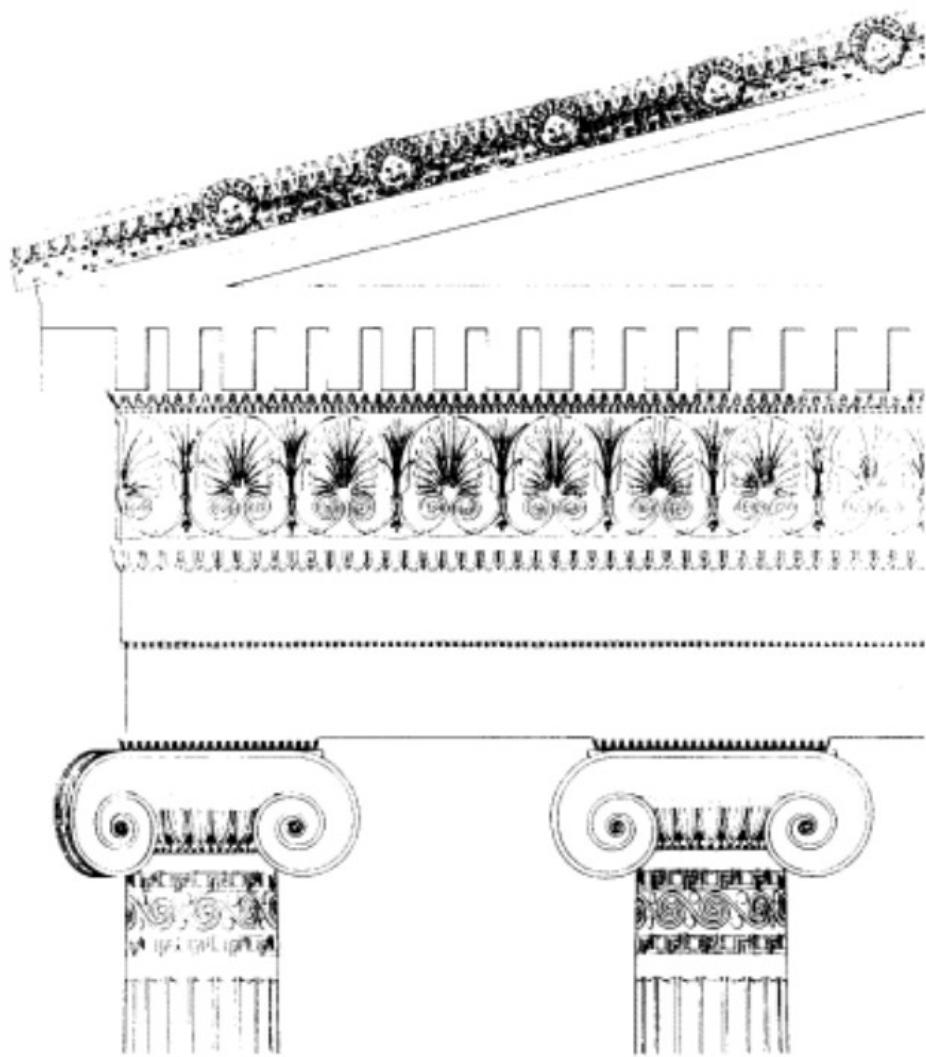


Illustration 7.  
Metapontion, Ionic temple. Detail of entablature.



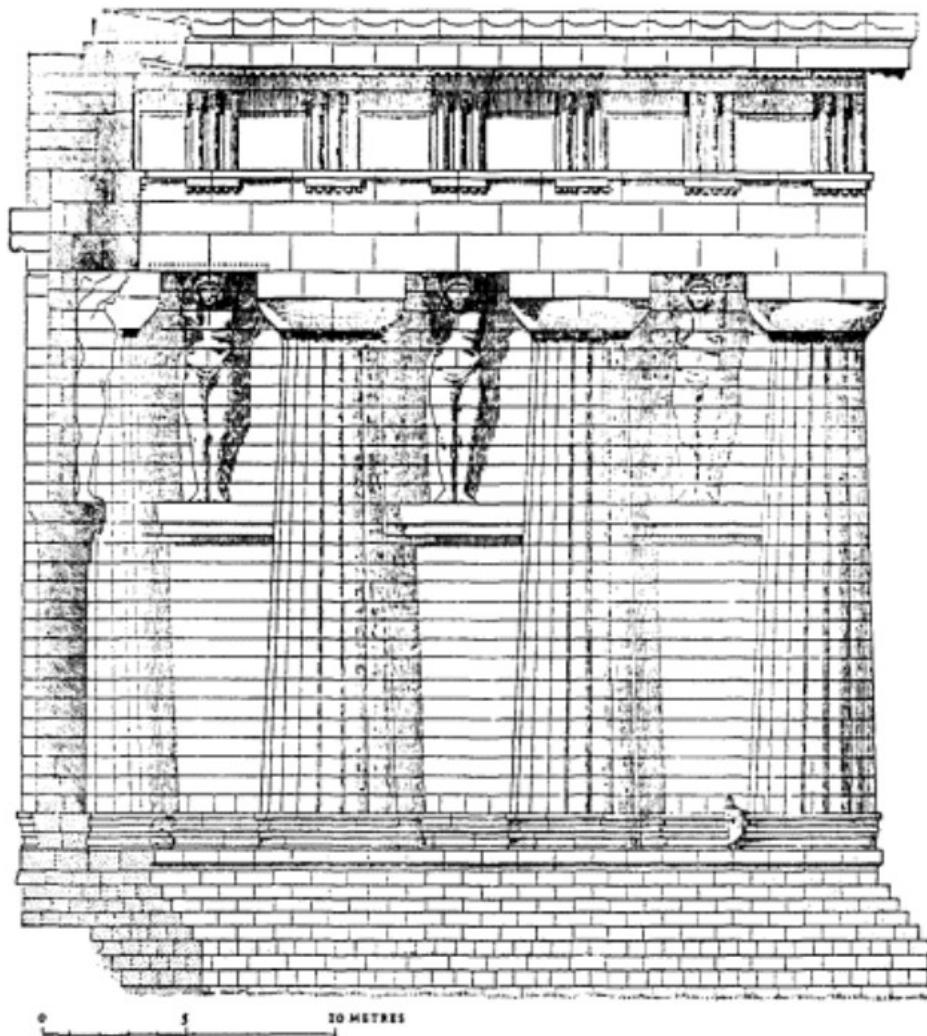


Illustration 8.  
Akragas, Olympieion. Reconstructed elevation.







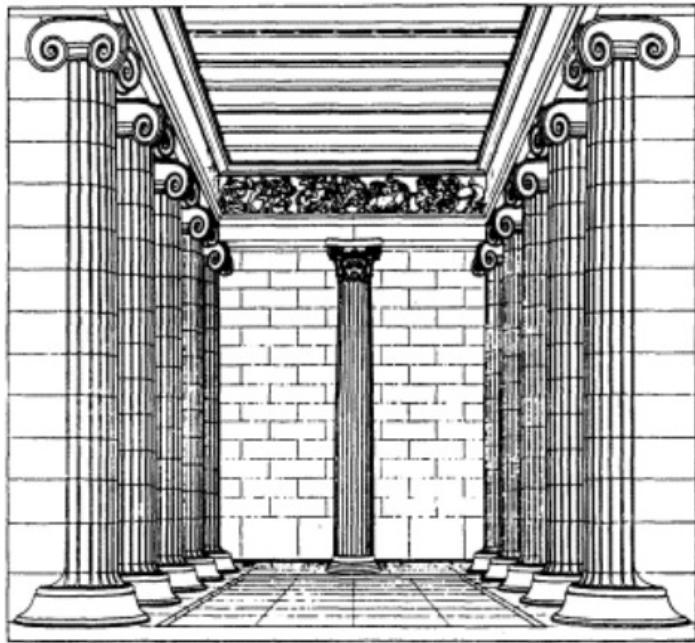
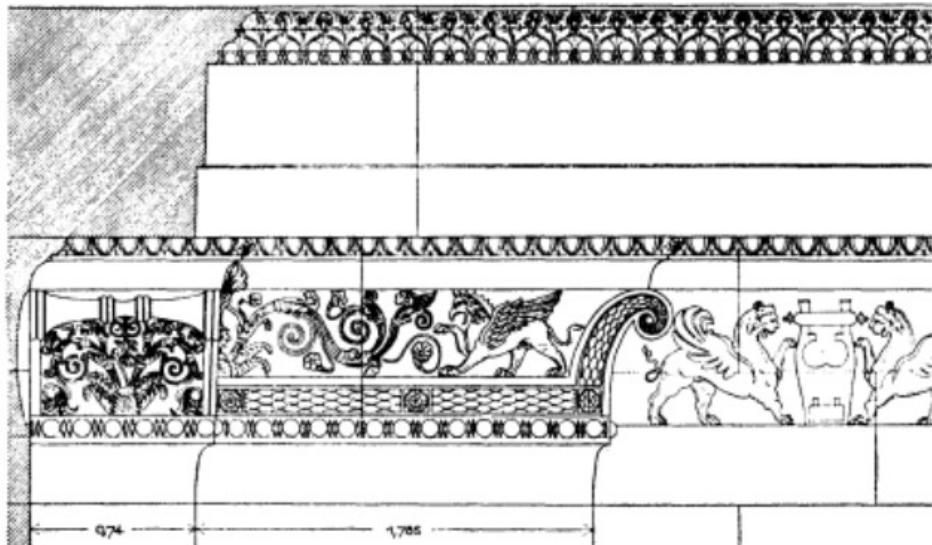


Illustration 9. Bassai, Temple of Apollo Epikourios. Interior of cella.





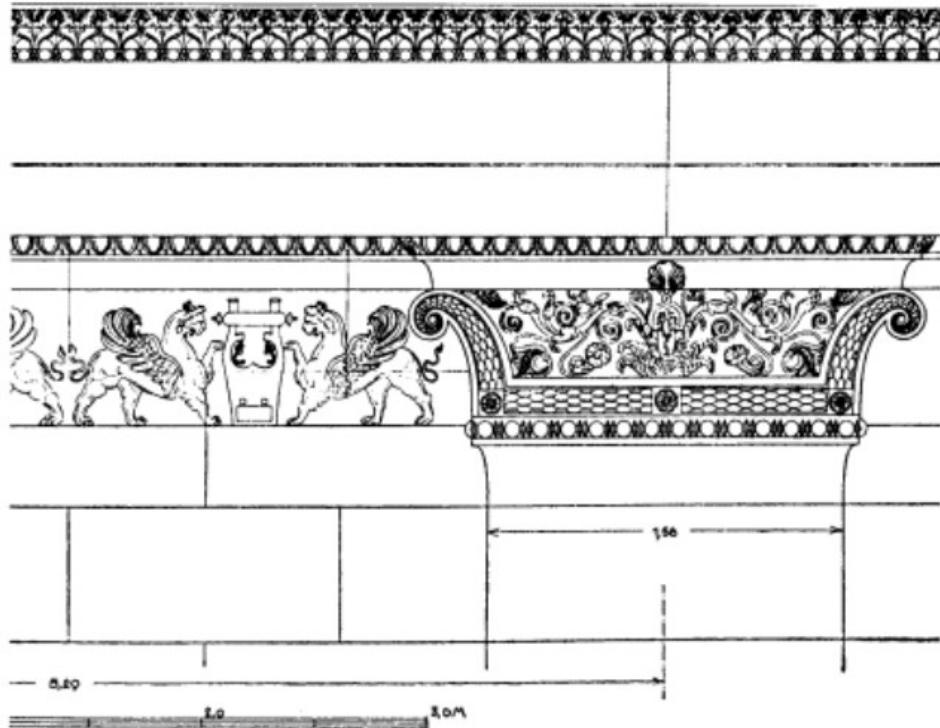


Illustration 10.

Didyma, Temple of Apollo. Entablature of inner courtyard.



Illustration 11.  
Assos, Temple of Athena. Reconstruction of cast façade.





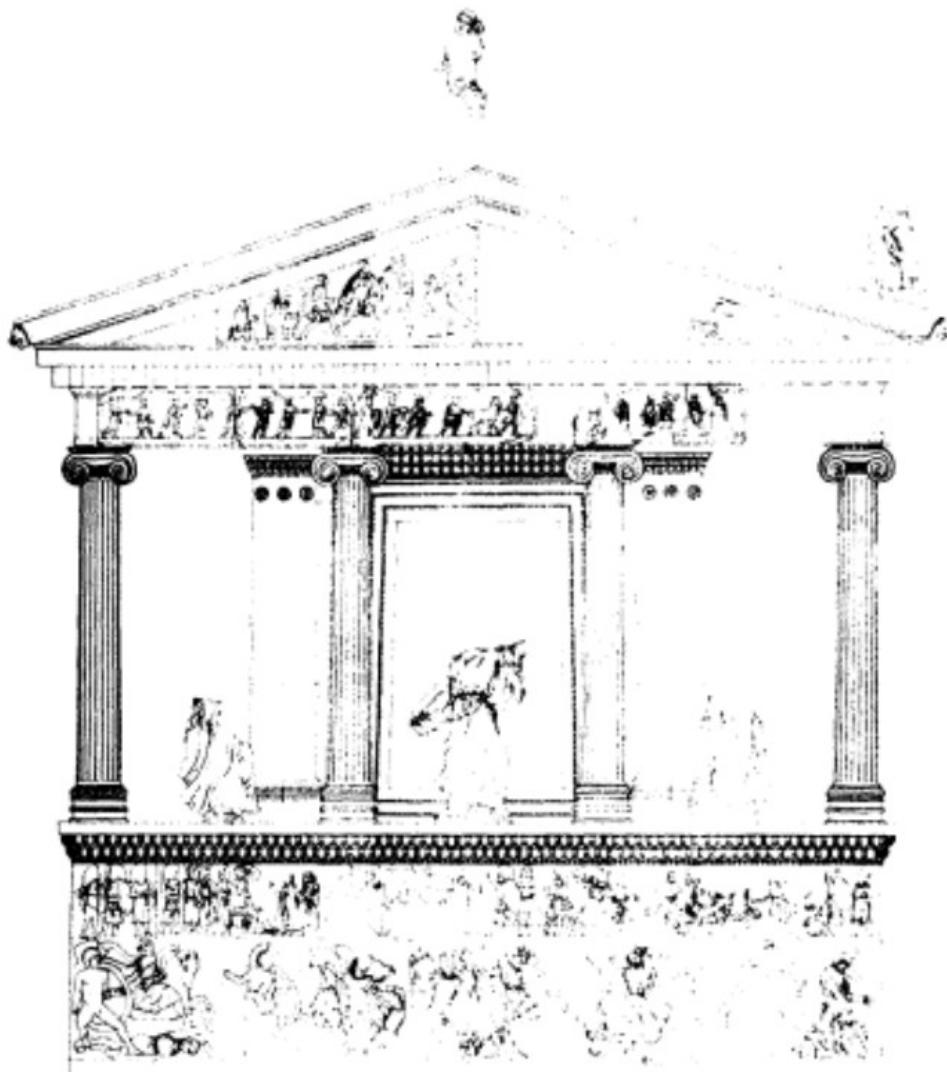


Illustration 12.

Xanthos, Nereid Monument. Reconstruction of west façade.



Illustration 13.  
Belevi Mausoleum. Reconstructed drawings of the best preserved









Illustration 14.  
Paestum, Temple of Athena. Restoration of east façade.

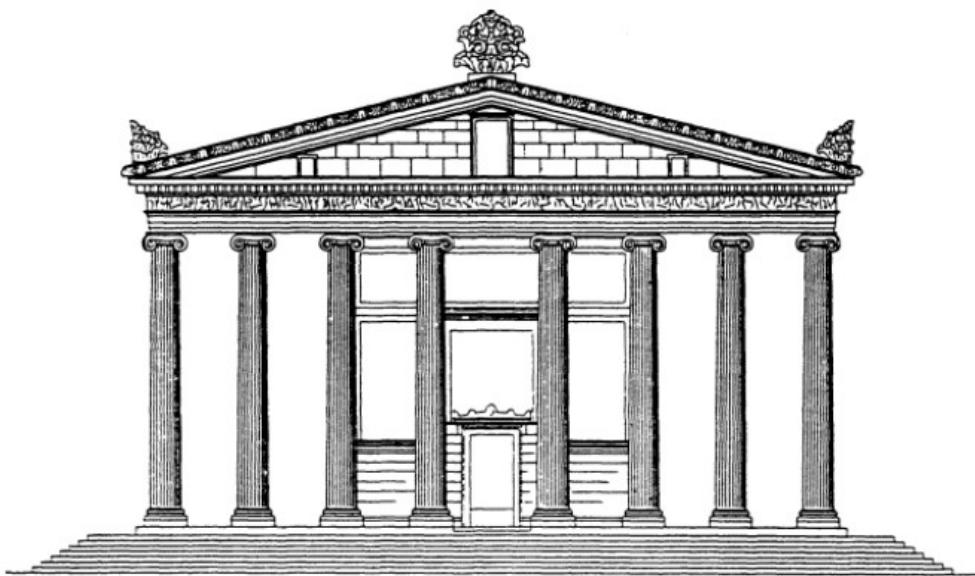


Illustration 15.

Magnesia, Temple of Artemis. Reconstruction of west façade.





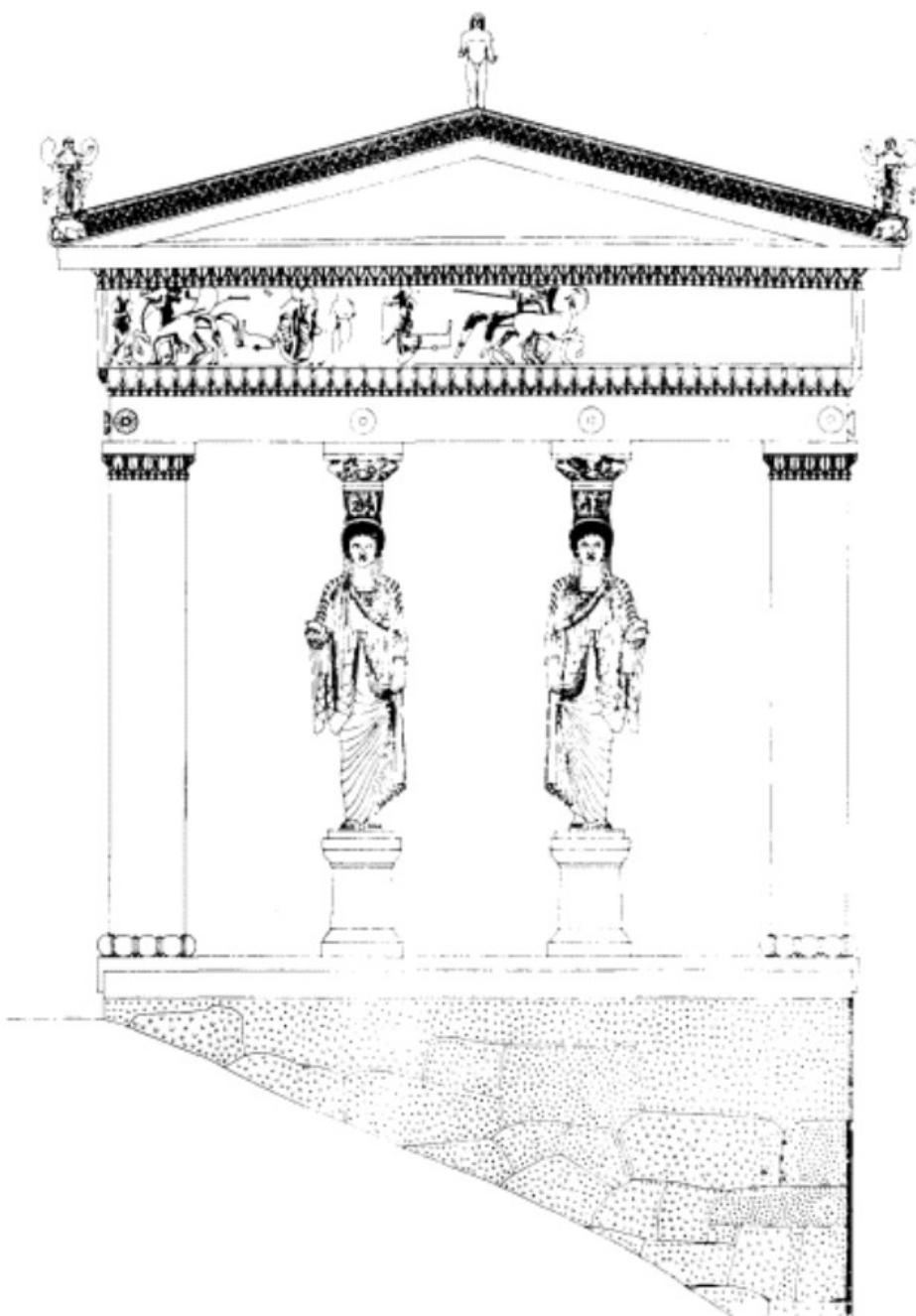


Illustration 16.

Delphi, Siphnian Treasury. Reconstruction of west façade.



Illustration 17.  
Argive Heraion, Second Temple of Hera. Sima.





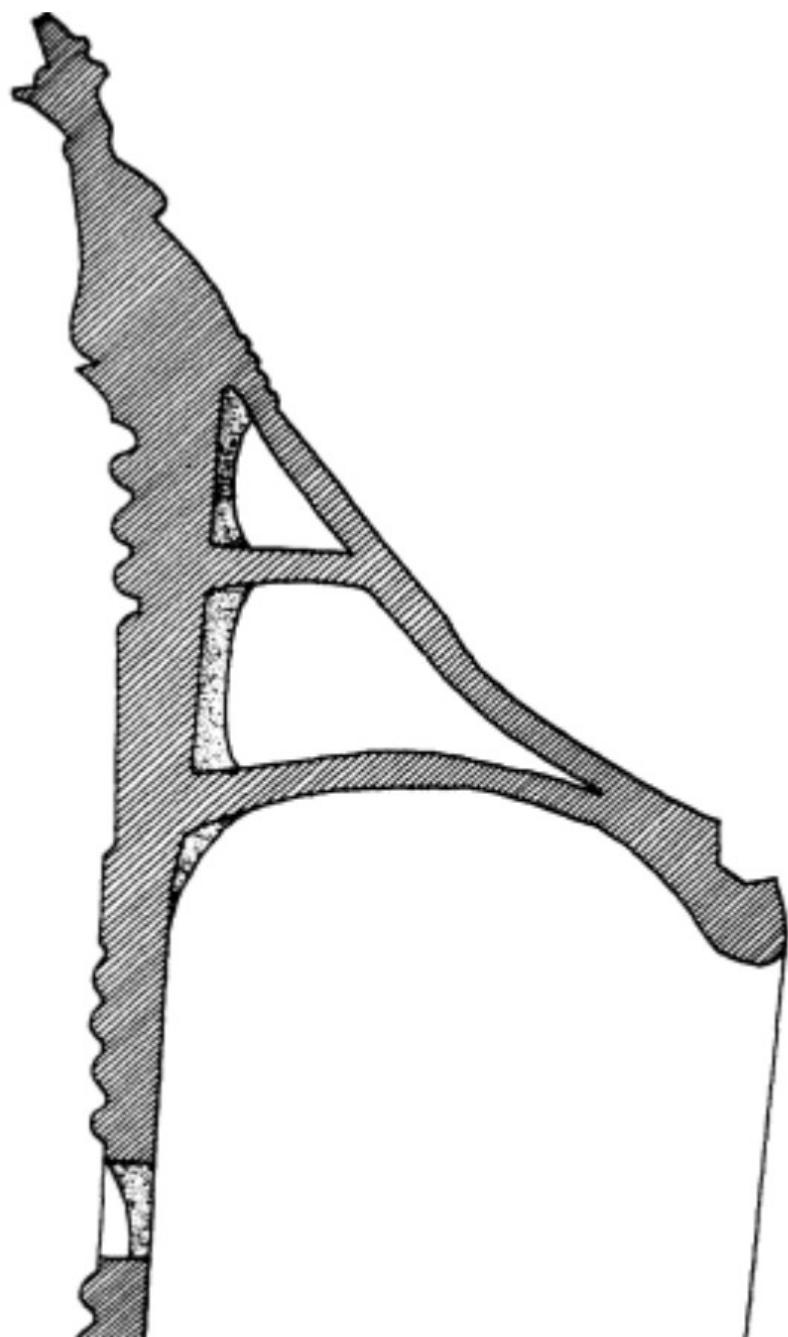


Illustration 18.

Olympia, Temple of Hera. Terracotta disk akroterion, section

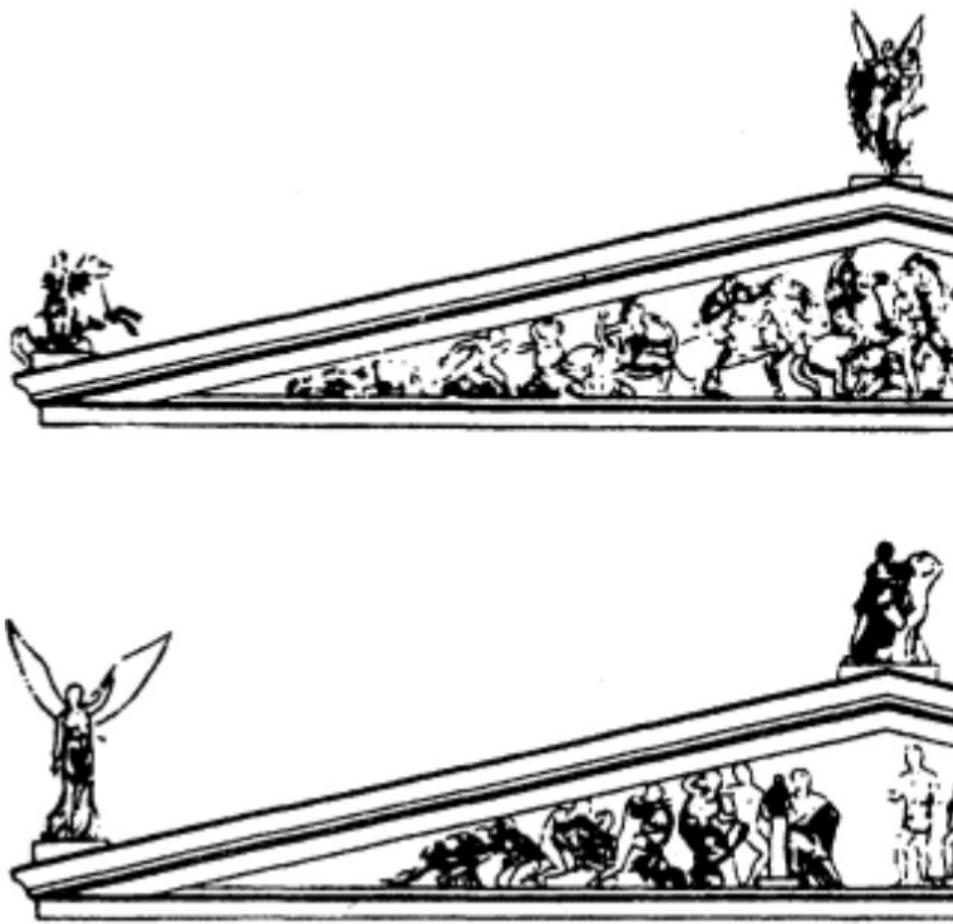


Illustration  
Epidauros, Temple of Asklepios. Reconstruction of akroterial

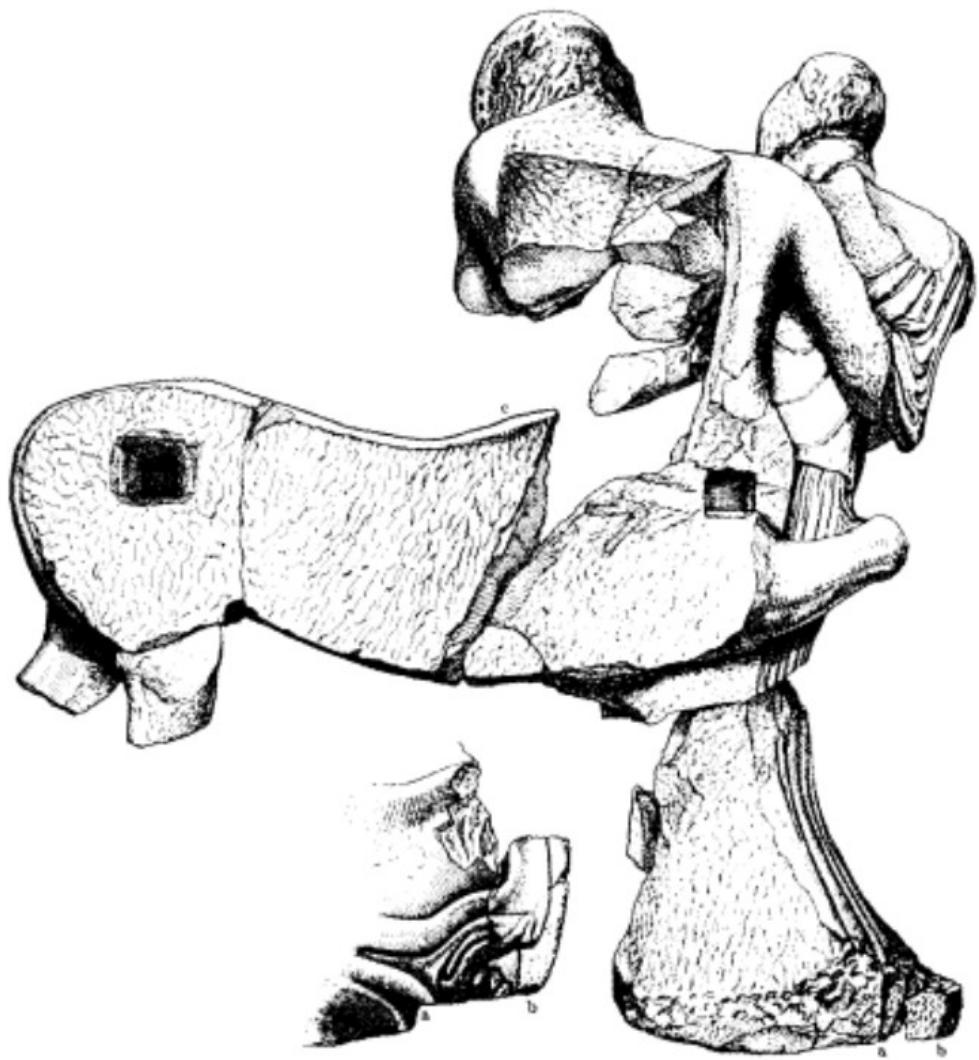


Illustration 20.  
Olympia, Temple of Zeus. West pediment, drawing fo rear side



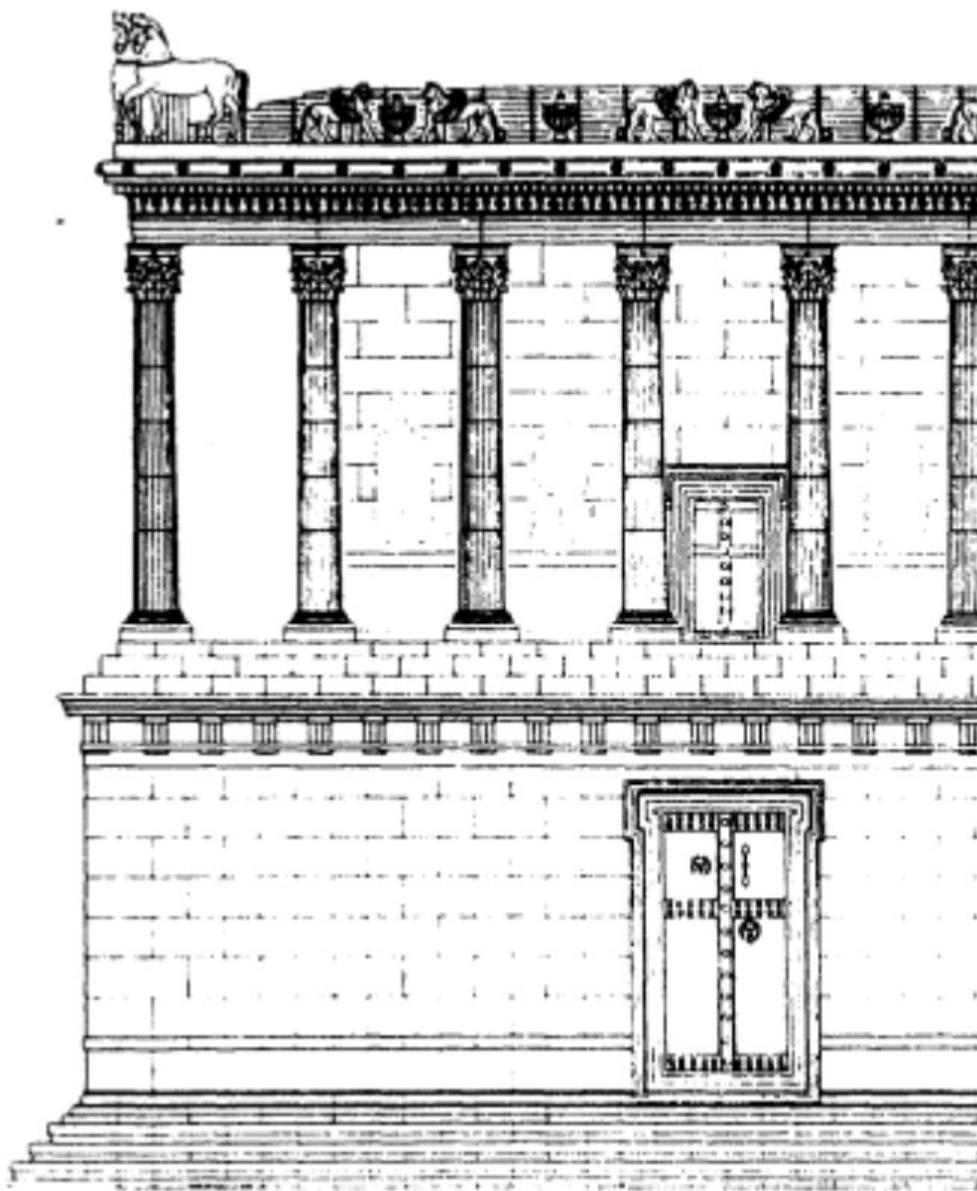


Illustration 21.

Belevi Mausoleum. Reconstruction of north façade. The presence  
of the columns is suggested by dotted lines.





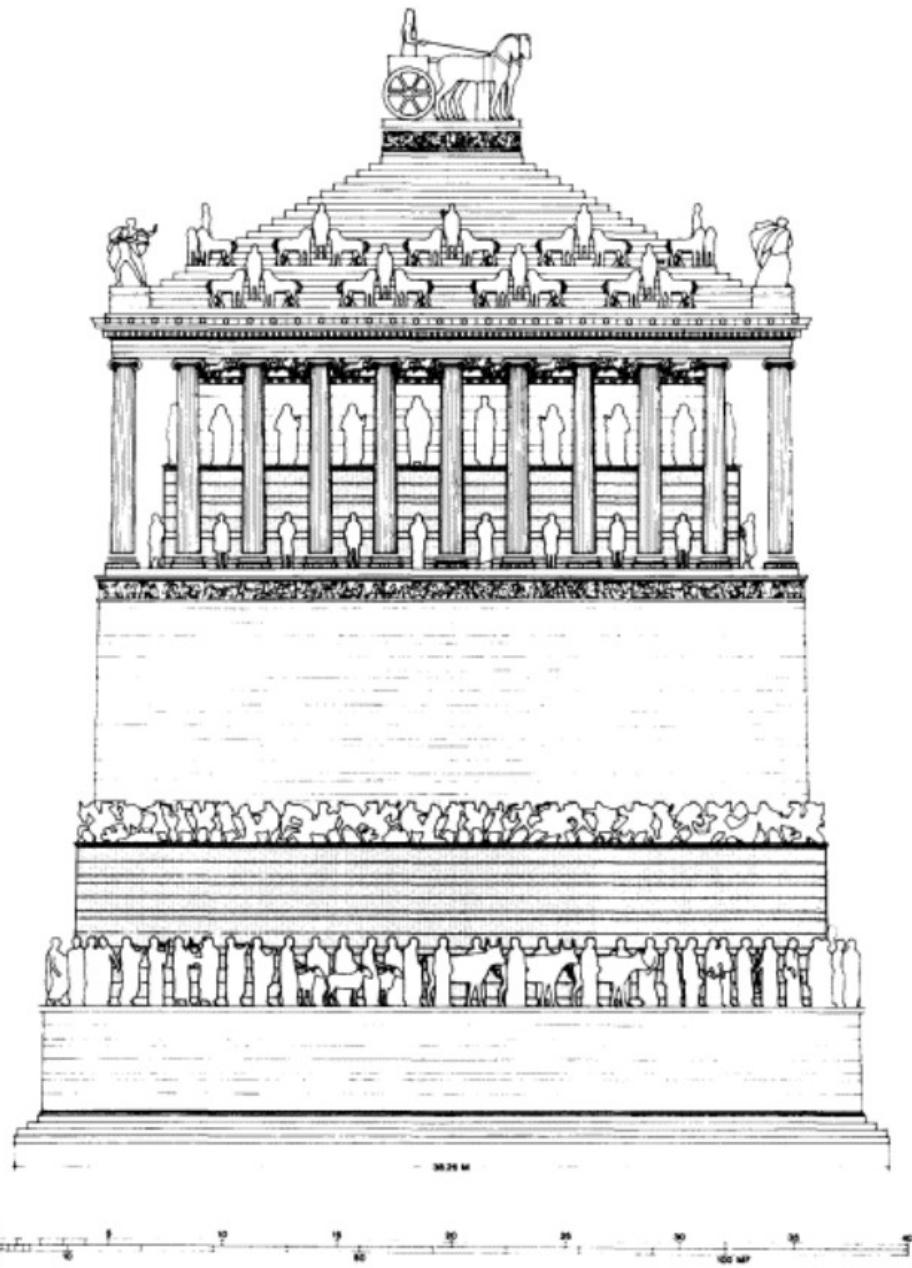


Illustration 22.

Halikarnassos Maussolleion. Reconstruction of south side.

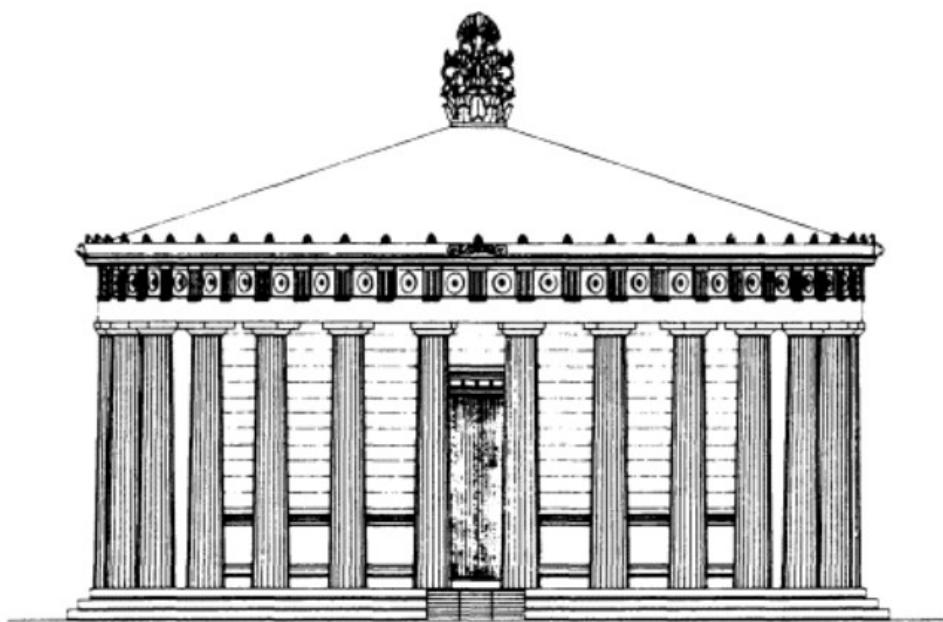


Illustration 23.  
Epidauros, Tholos. Reconstructed elevation.





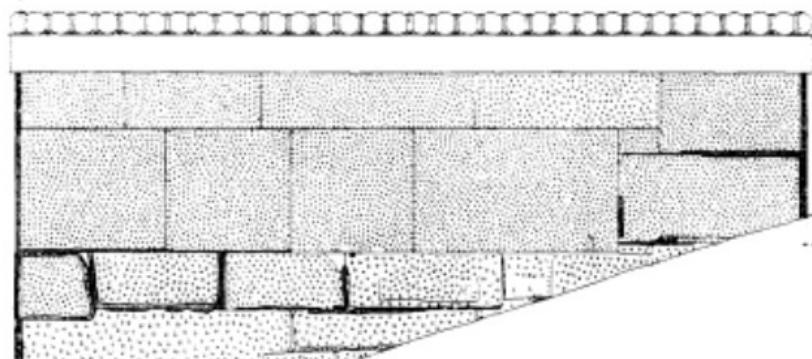


Illustration 24.  
Delphi, Siphnian Treasury. Reconstruction of east façade.

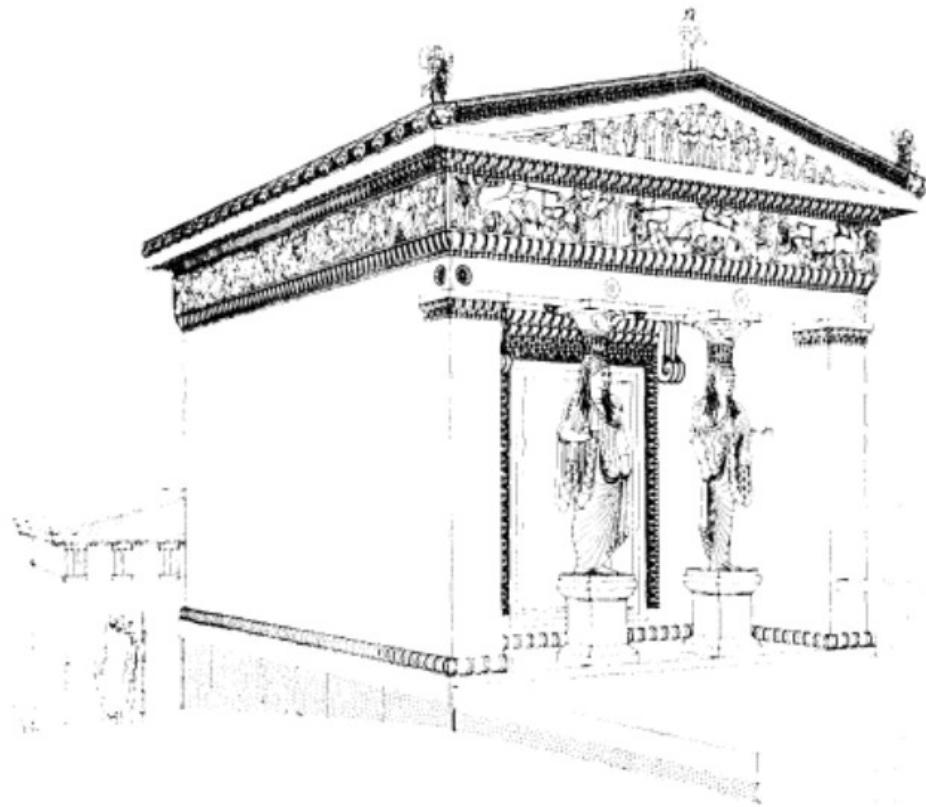
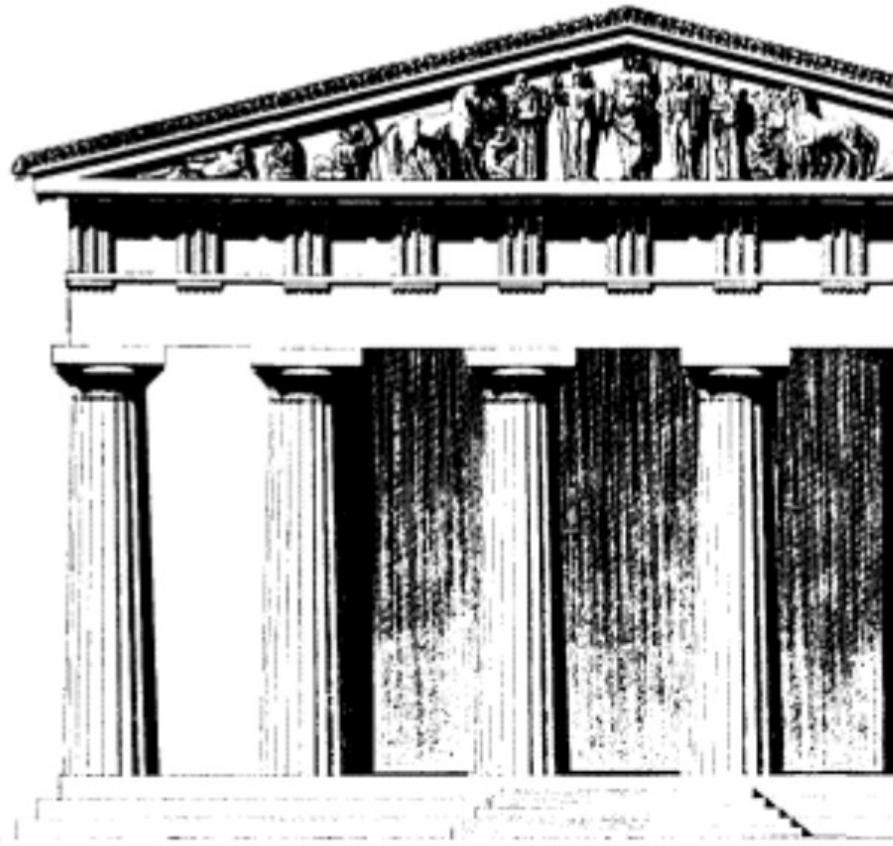


Illustration 25.  
Delphi, Siphnian Treasury. Reconstruction of north-  
west corner view.







Illustrations 26a and b.  
Olympia, Temple of Zeus. Reconstruction of east façade and

Opisthodomos

Athena/ Enkelados *	Apollo/ Daphne (*)	Poseidon/ Amphitrite	Aphrodite
1	2	3	4

Pronaos

Salmoneus/ Iris	Herakles/ Amazon *	Kronos/ Rhea	Zeus
1	2	3	4

Illustration 27.

Selinous, Temple F. Reconstructed sequence of metopes according to extant; asterisks in parentheses indicate panels for which fragments are lost; panels without markings are lost.



Illustration 28.  
Athens, Parthenon. Section of east elevation.



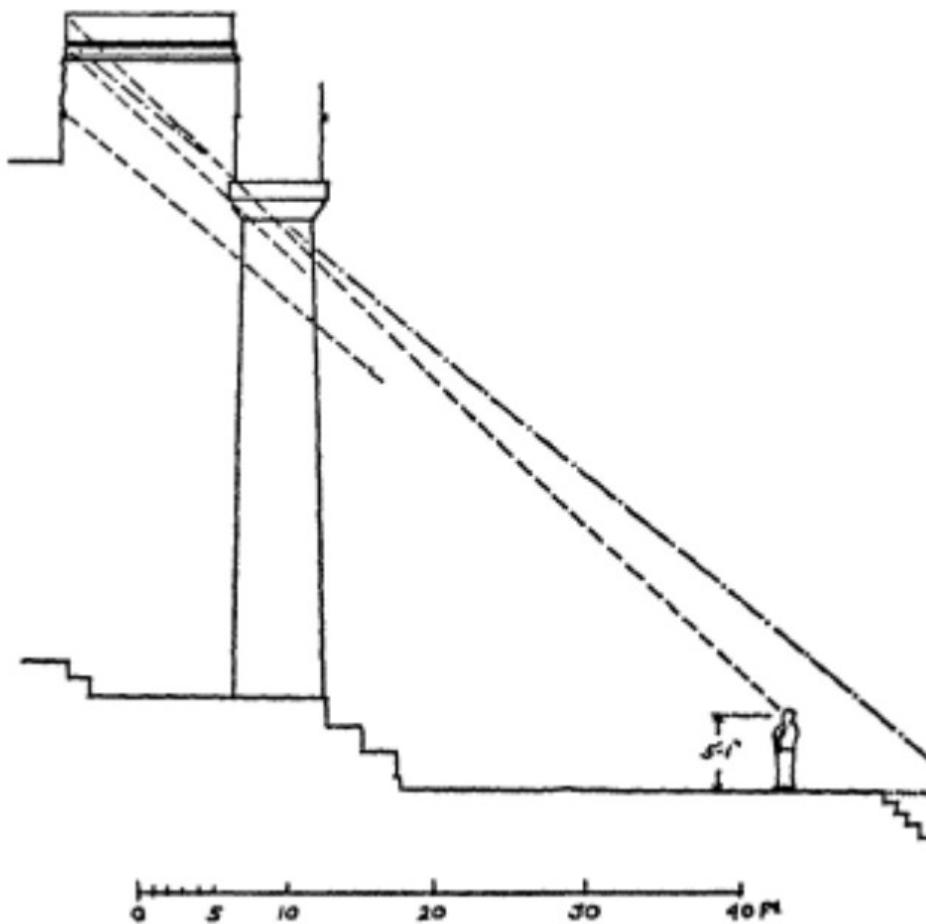


Illustration 29.

Athens, Parthenon. Diagram of spectators' viewpoints for best west frieze.







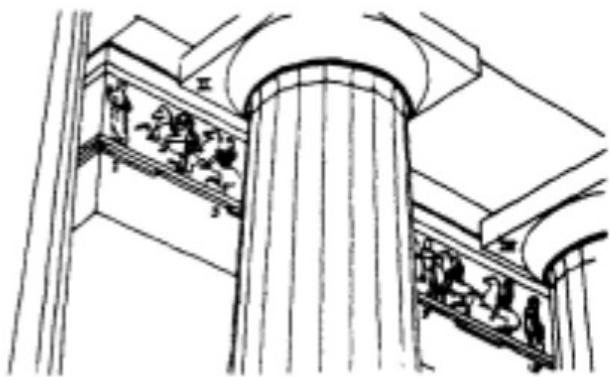


Illustration 30.

Athens, Parthenon. Fractional views of the west frieze accord

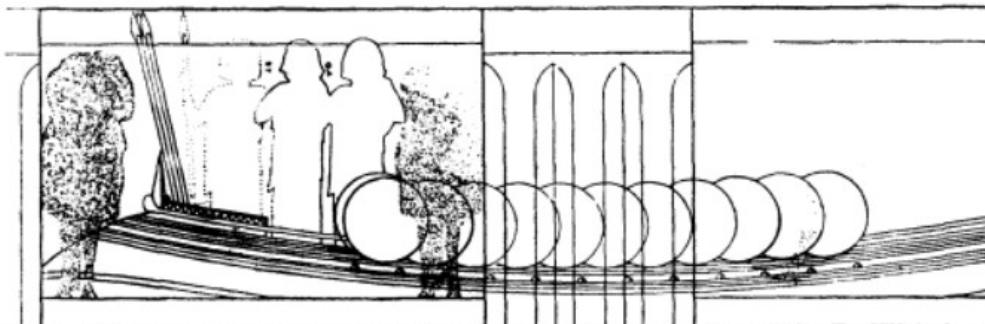


Illustration 31.  
Delphi, "Sicyonian Treasury." Reconstruction of metopes with





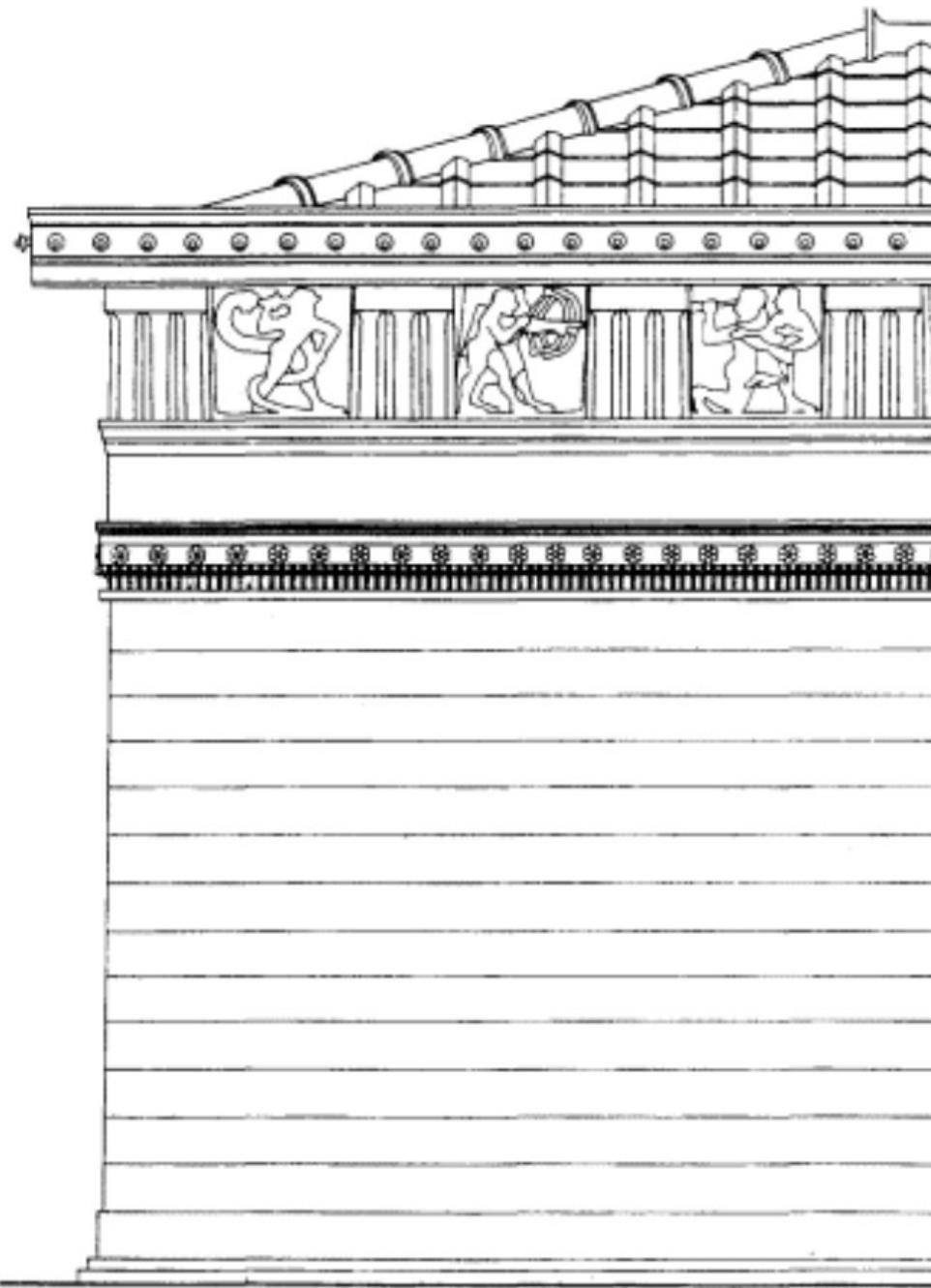


Illustration 32.

Foce del Sele, "Treasury" (or first Temple of Hera). Partial re-  
south side, west end (the front part has been omitted since the  
building is uncertain; the metopes with Apollo/Artemis and  
Leto are the  
2nd and 3rd panels from left).

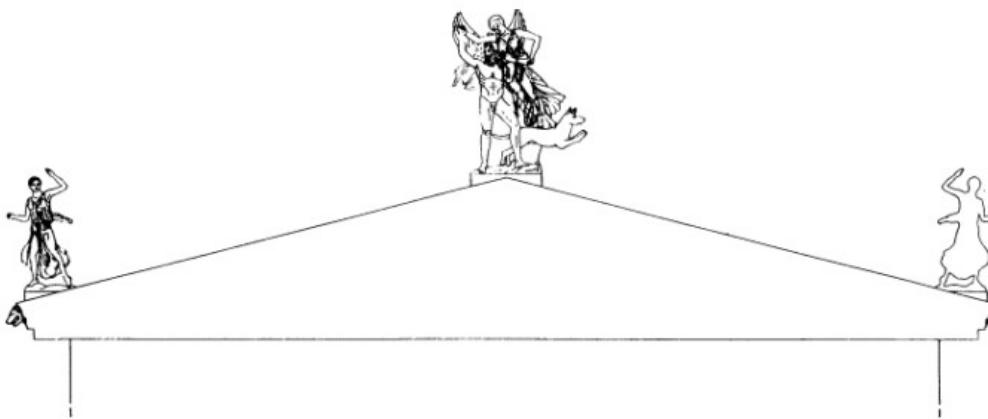


Illustration 33.  
Delos, Temple of the Athenians. Reconstruction of east façade





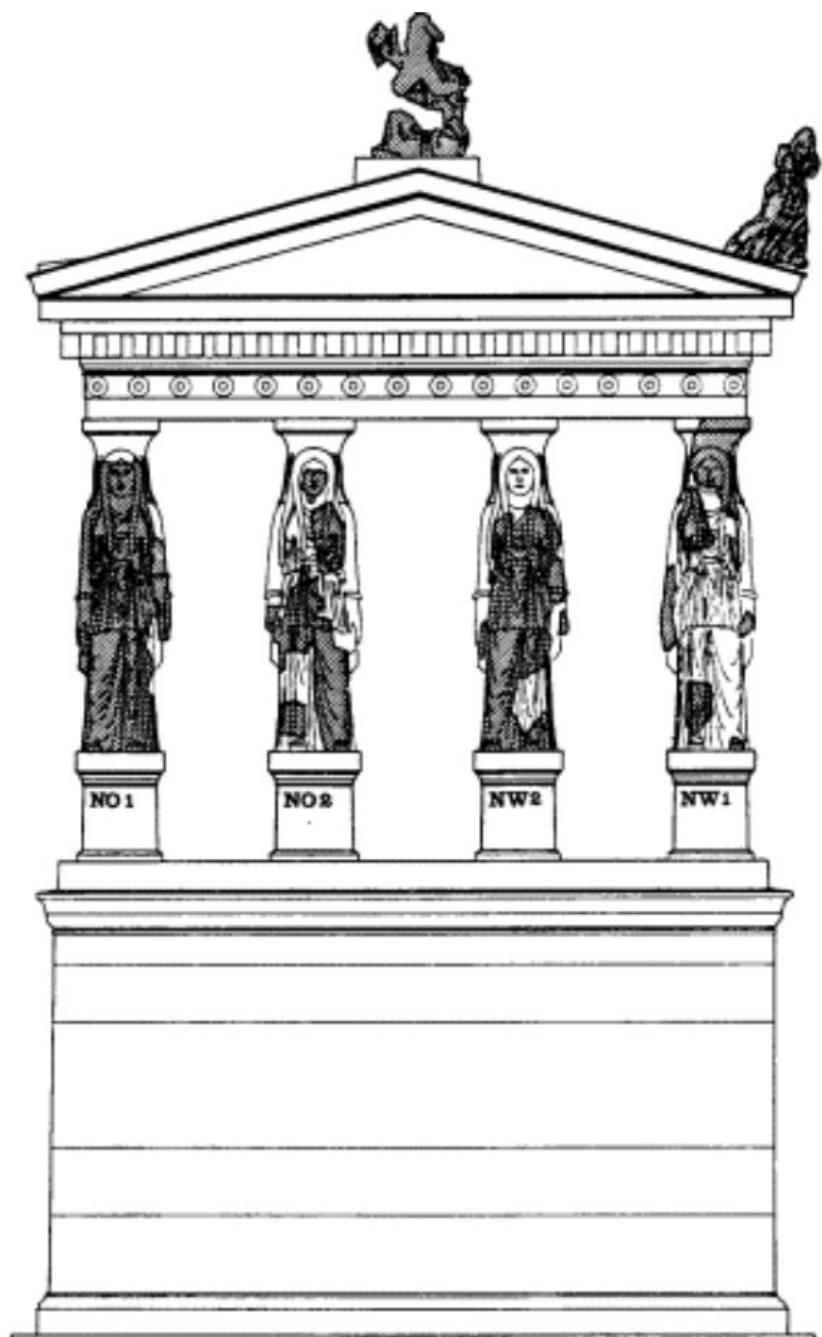
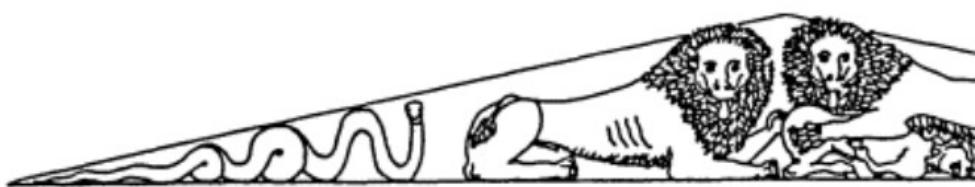


Illustration 34.

Limyra, Heroon of Perikle. Reconstruction of north façade.



Illustrations 35a and b.  
Athens, Hekatompedon. Reconstruction of both pediments acc





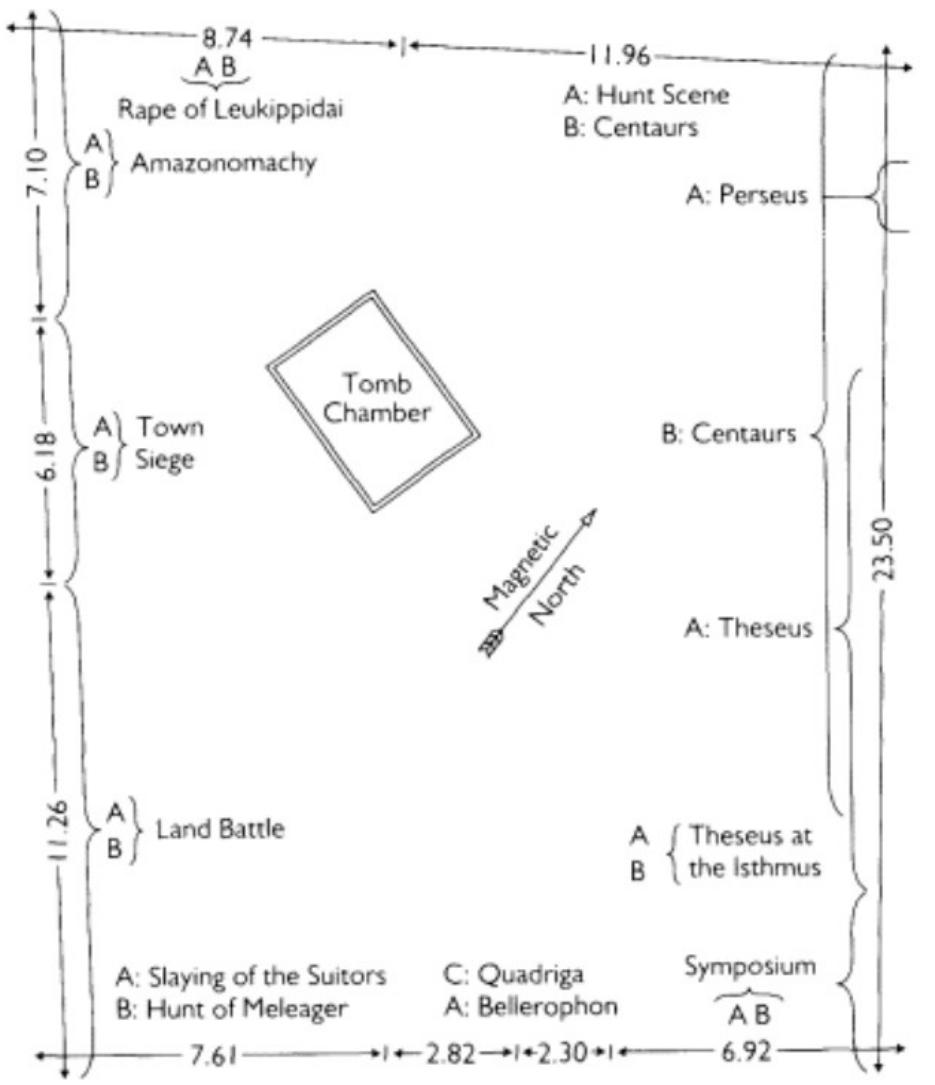


Illustration 36.

Belevi Mausoleum. Reconstruction of the upper (Corinthian)







0 1 2 3 4 5 6 7 8 9 10 M

Illustration 37.  
Trysa, Heroon. Plan with indication of sculptural topics.

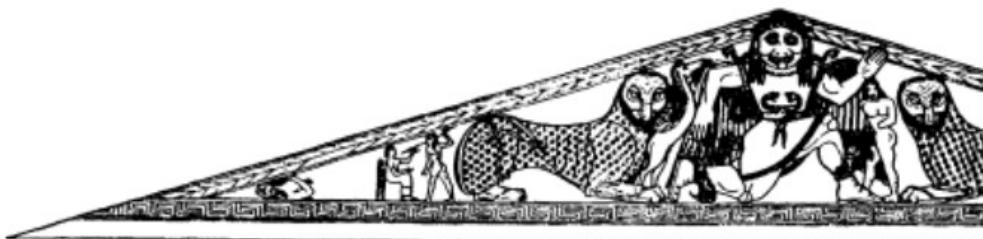


Illustration 38.

Corfu, Temple of Artemis. Restored drawing of pedimental co

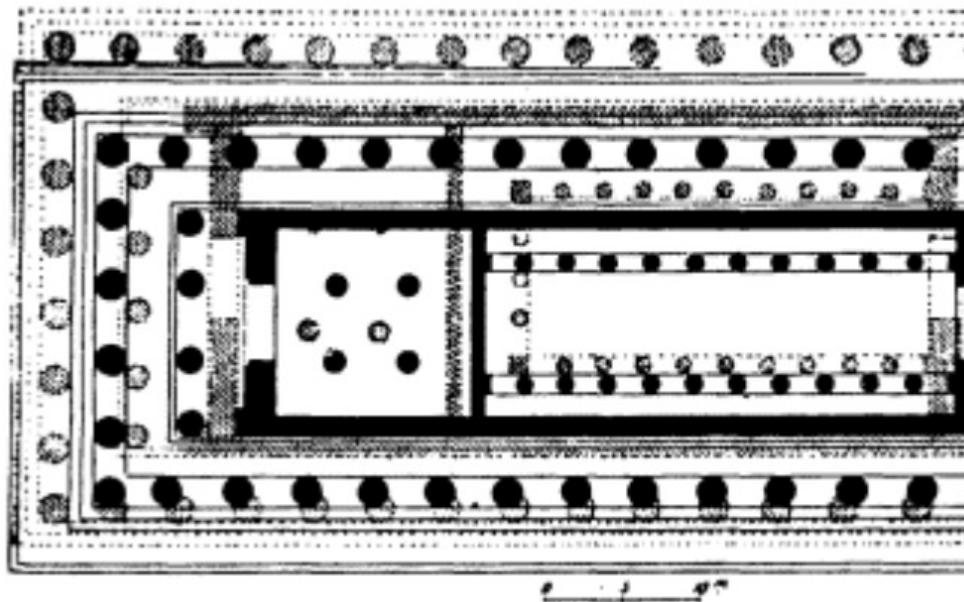


Illustration. 39.

Athens, Akropolis. Plan of Older Parthenon (solid lines) super  
of Parthenon (hatched lines).

# Figures



Figure 1.  
Alexander Sarcophagus, general view. Istanbul Museum.



Figure 2.

Alexander Sarcophagus, detail of Battle side. Istanbul Museum



Figure 3.  
Athens, Erechtheion. Detail of column bases in north porch.



Figure 4.  
Didyma, Hellenistic Temple of Apollo.  
Column base with Nereid and Triton.

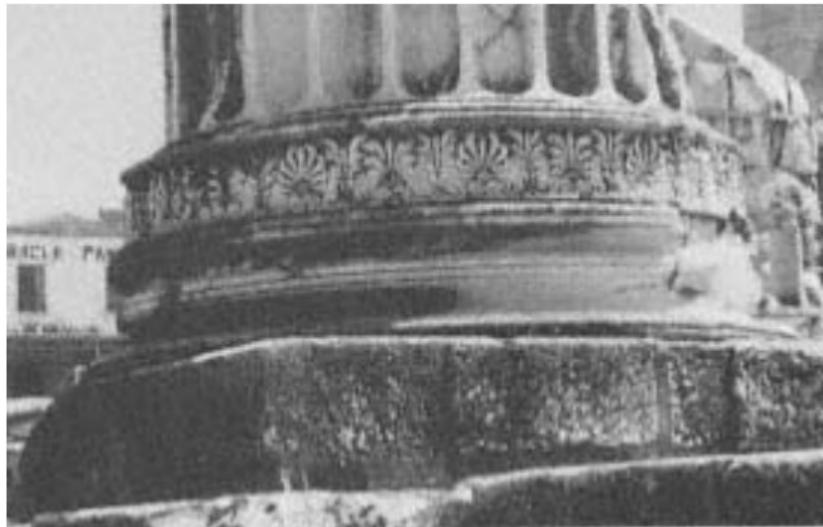


Figure 5.  
Didyma, Hellenistic Temple of Apollo.  
Column base with floral ornament.



Figure 6.  
Athens, Erechtheion. South porch, detail  
of Karyatids and entablature



Figure 7.  
Olympia, Temple of Zeus. *Metope of  
the Apples of the Hesperides.*



Figure 8.  
Didyma, Hellenistic Temple of Apollo. Sofa capital from cour-



Figure 9.  
Didyma, Hellenistic Temple of Apollo. Sofa capital from cou

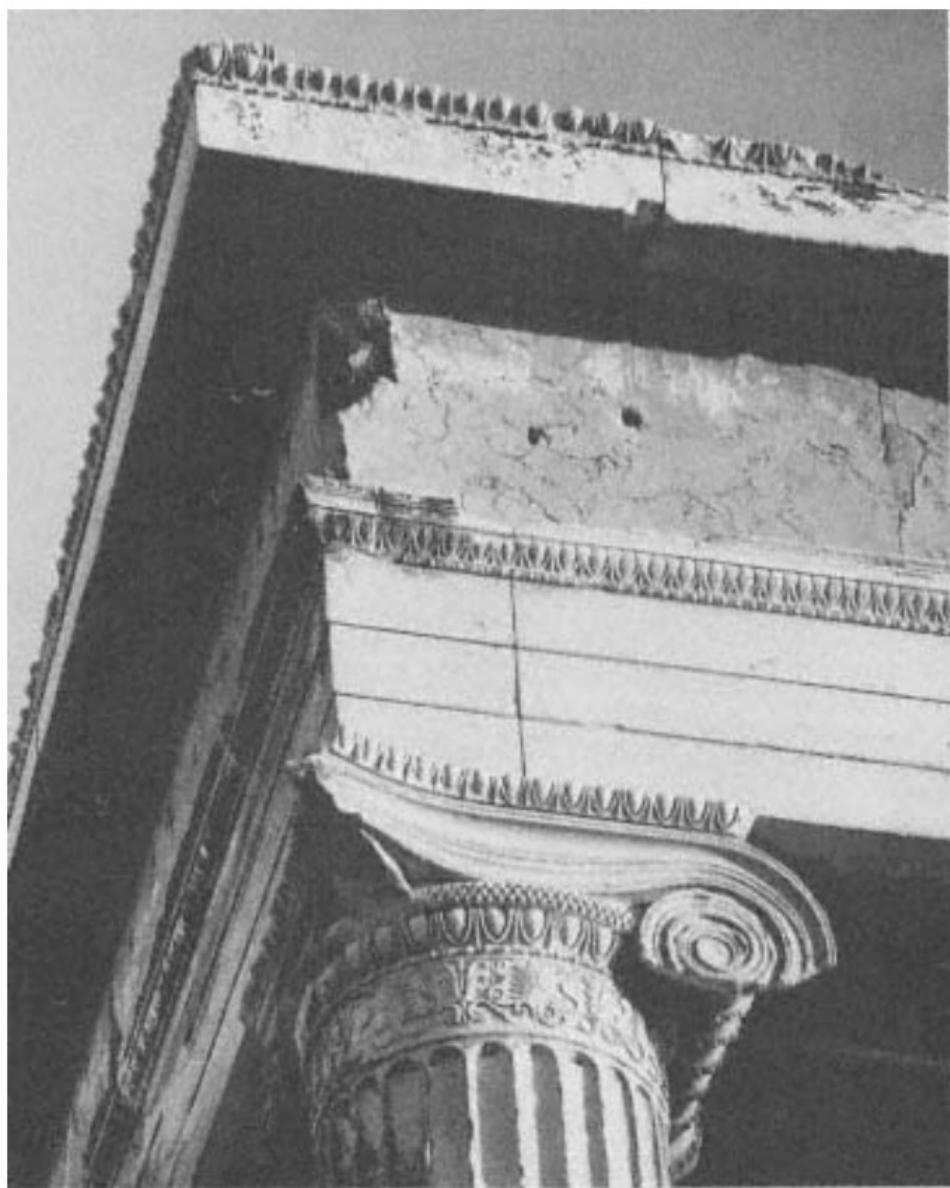


Figure 10.  
Athens, Erechtheion. Entablature of north porch.

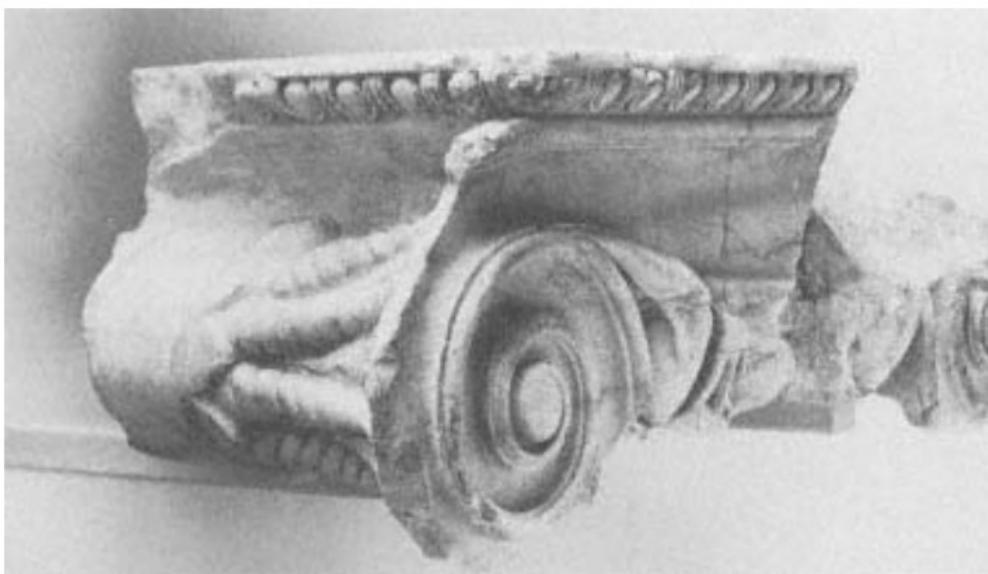


Figure 11.  
Pergamon Altar. Ionic capital with thunderbolt. Berlin Museum

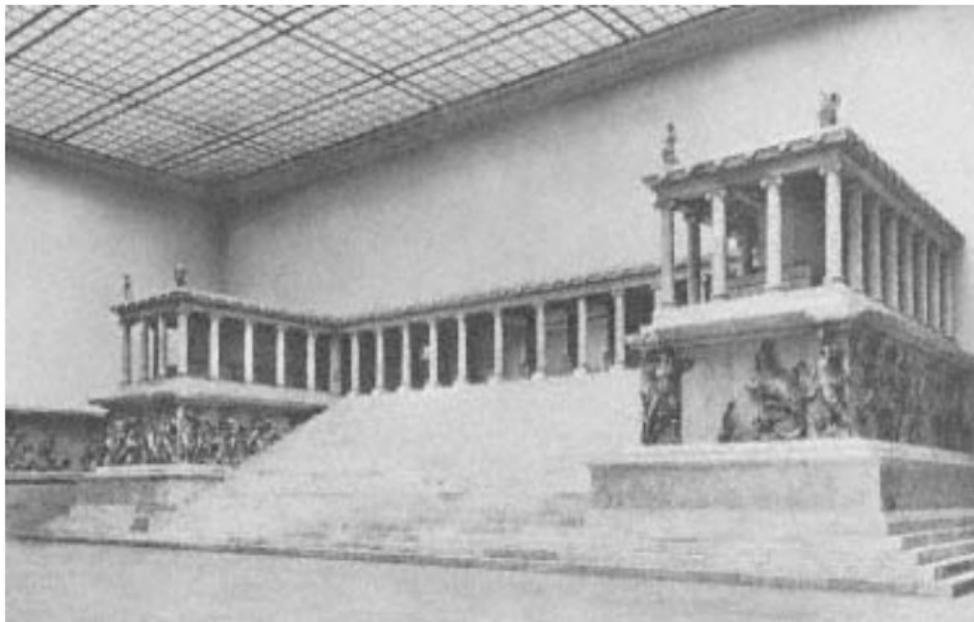


Figure 12.

Pergamon Altar. Reconstruction of west side in Berlin Museum



Figure 13.  
Athens, Erechtheion. Detail of anthemion molding.

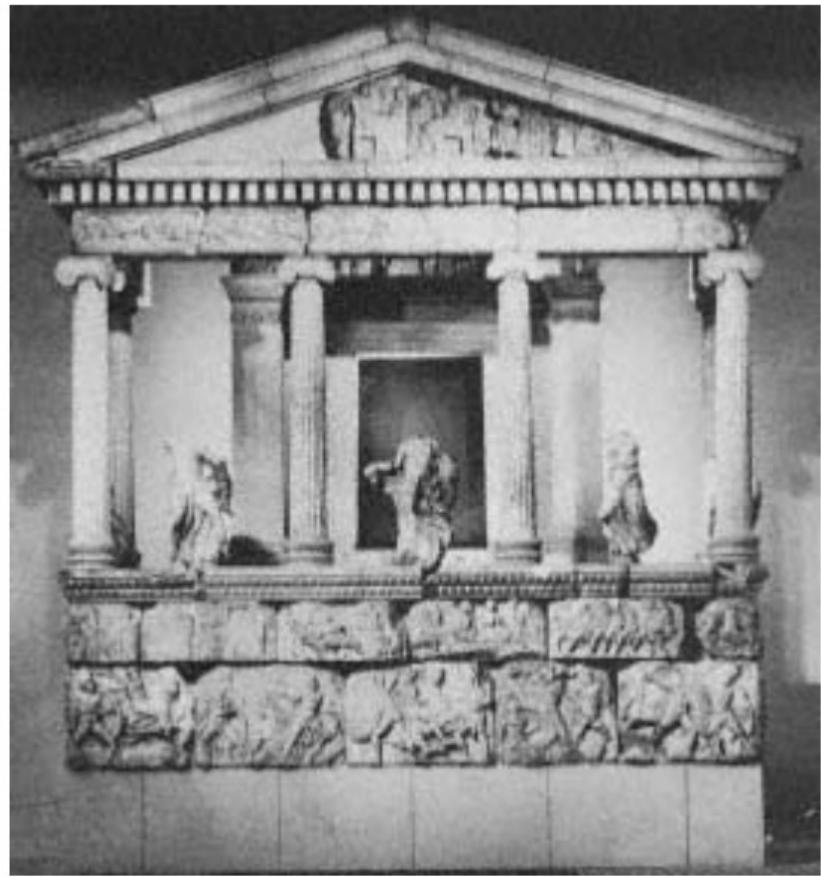


Figure 14.

Xanthos, Nereid Monument. East façade as presently reconstructed in London, British Museum.



Figure 15.  
Delos, Stoa of Antigonos Gonatas. Detail of triglyph frieze.



Figure 16.  
Morgantina, terracotta antefix depicting lion's skin.



Figure 17.  
Delos, Temple of the Athenians. Central  
akroterion (east): Boreas kidnapping  
Oreithyia. Delos Museum.



Figure 18.  
Delos, Temple of the Athenian. Lateral  
akroterion (cast). Delos Museum.

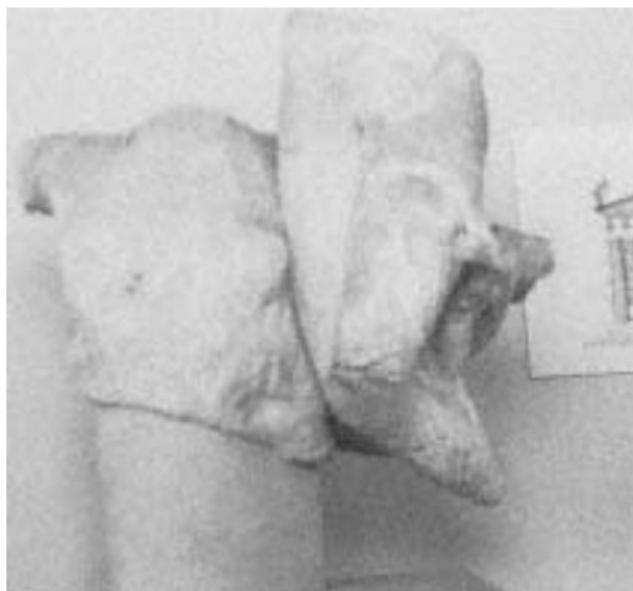


Figure 19.  
Delos, Temple of the Athenian. Central  
(west) akroterion: Eos kidnapping Kephalos.  
Delos Museum.



Figure 20.  
Limvra, Heroon of Perikle. Central (north)  
akroterion: Perseus and Medousa.  
Antalya Museum.



Figure 21.  
Limyra, Heroon of Perikle. Lateral  
(north) akroterion: sister of Medousa.  
Antalya Museum.



Figure 22.  
Aigina, Temple of Aphaia. East pediment, falling  
warrior (Telamon's opponent), front view. Munich  
Glyptothek. Cf. fallen warrior of plate 2.



Figure 23.  
Aigina, Temple of Aphaia. East pediment,  
falling warrior (Telamon's opponent), rear  
view. Munich Glyptothek.



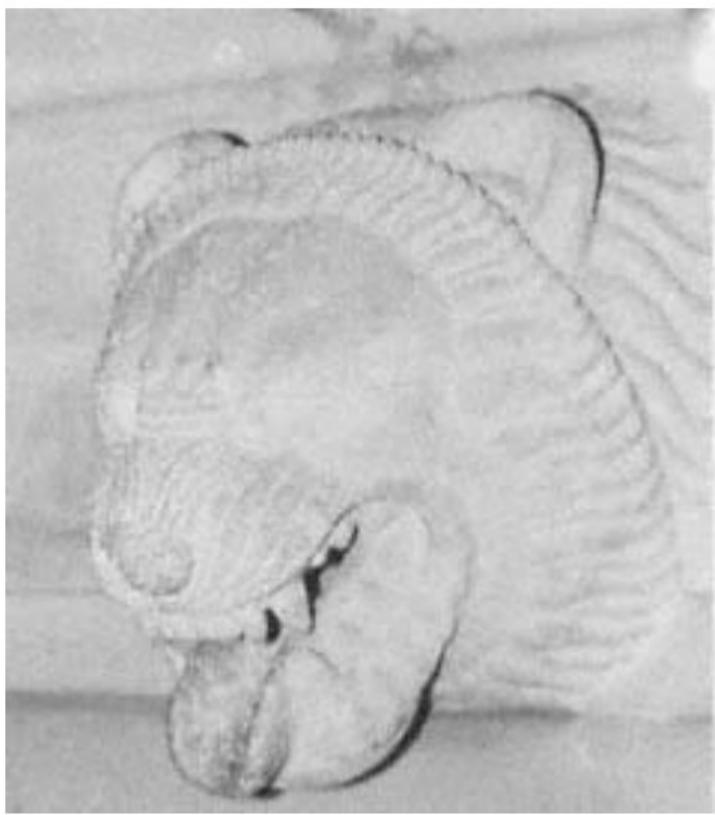


Figure 24.  
Himera, "Temple of Victory" (Athenaion).  
Lionhead waterspout from north side. Palermo  
Archaeological Museum.

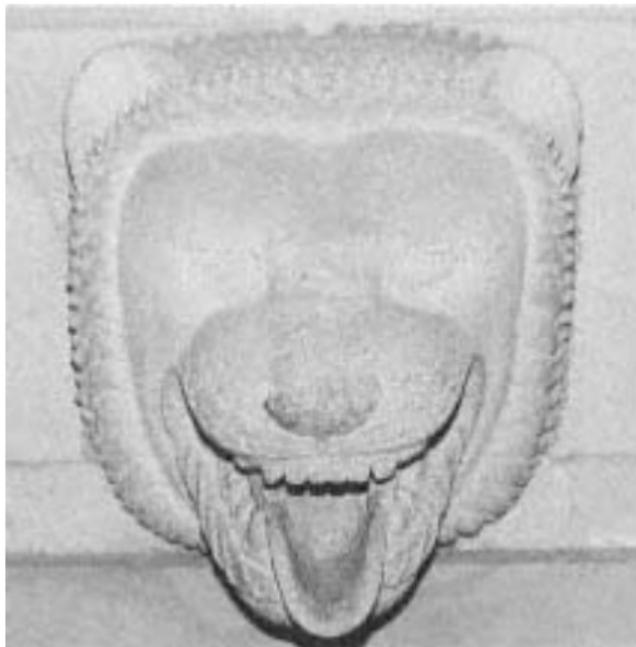


Figure 25.  
Himera, "Temple of Victory" (Athenaion).  
Lion-head waterspout from north side.  
Palermo Archaeological Museum.



Figure 26.  
Himera, "Temple of Victory" (Athenaion).  
Lion-head waterspout from south side.  
Palermo Archaeological Museum.



Figure 27.  
Aigina, Temple of Aphaia. West pediment,  
head of central Athena showing holes for metal  
attachments (on ears and helmet).  
Munich Glyptothek.



Figure 28.  
Pergamon Altar, Gigantomachy Frieze. East side, panel with  
Berlin Museum.



Figure 29.  
Limyra, Ptolemaoin. Metope with Kentauroromachy,  
Antalya Museum.



Figure 30.  
Limyra, Ptolemaion. Metope with Kentauroomachy.  
Antalya Museum.

# Plates







Plate 1

Athens, Parthenon, entablature. Reconstruction of color scheme  
by B. Loviot (envoi 1880)



Plate 2

Aigina, Temple of Aphaia. East pediment. Color reconstruction  
to Furtwängler 1903. Cf. figure 22 (falling w



### Plate 3

Athens, Hekatompedon. So-called Bluebeard from pediment, Athens, National Akropolis.

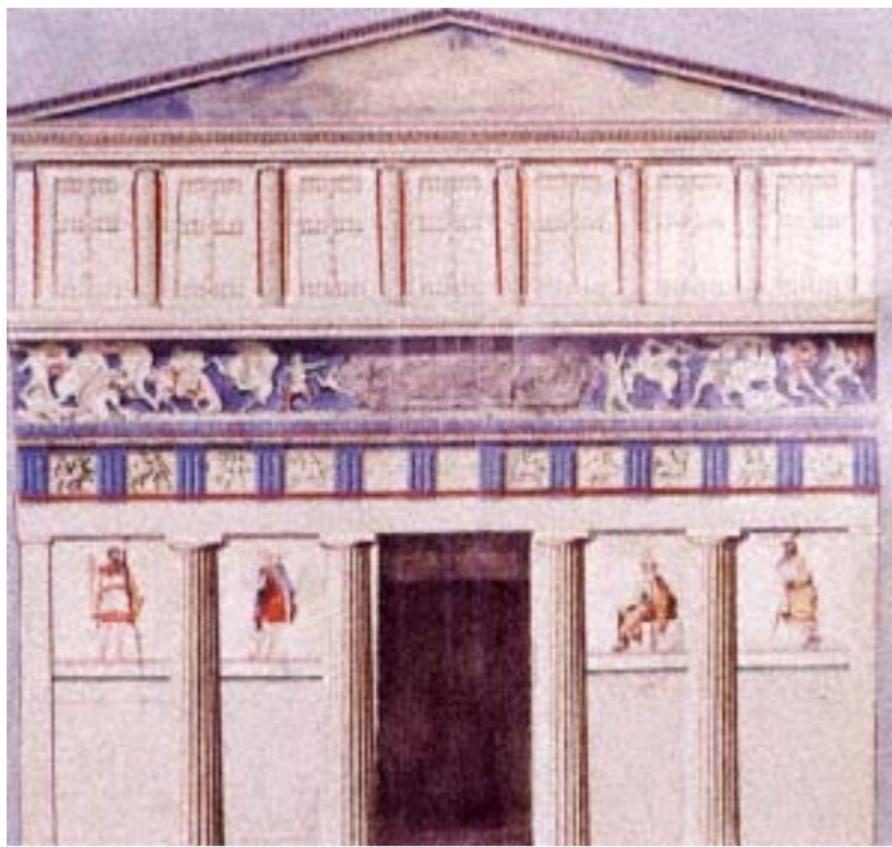


Plate 4  
Great (Judgment) Tomb. Reconstruction of façade.







Plate 5  
Athens, city. Monument of Lysikrates.





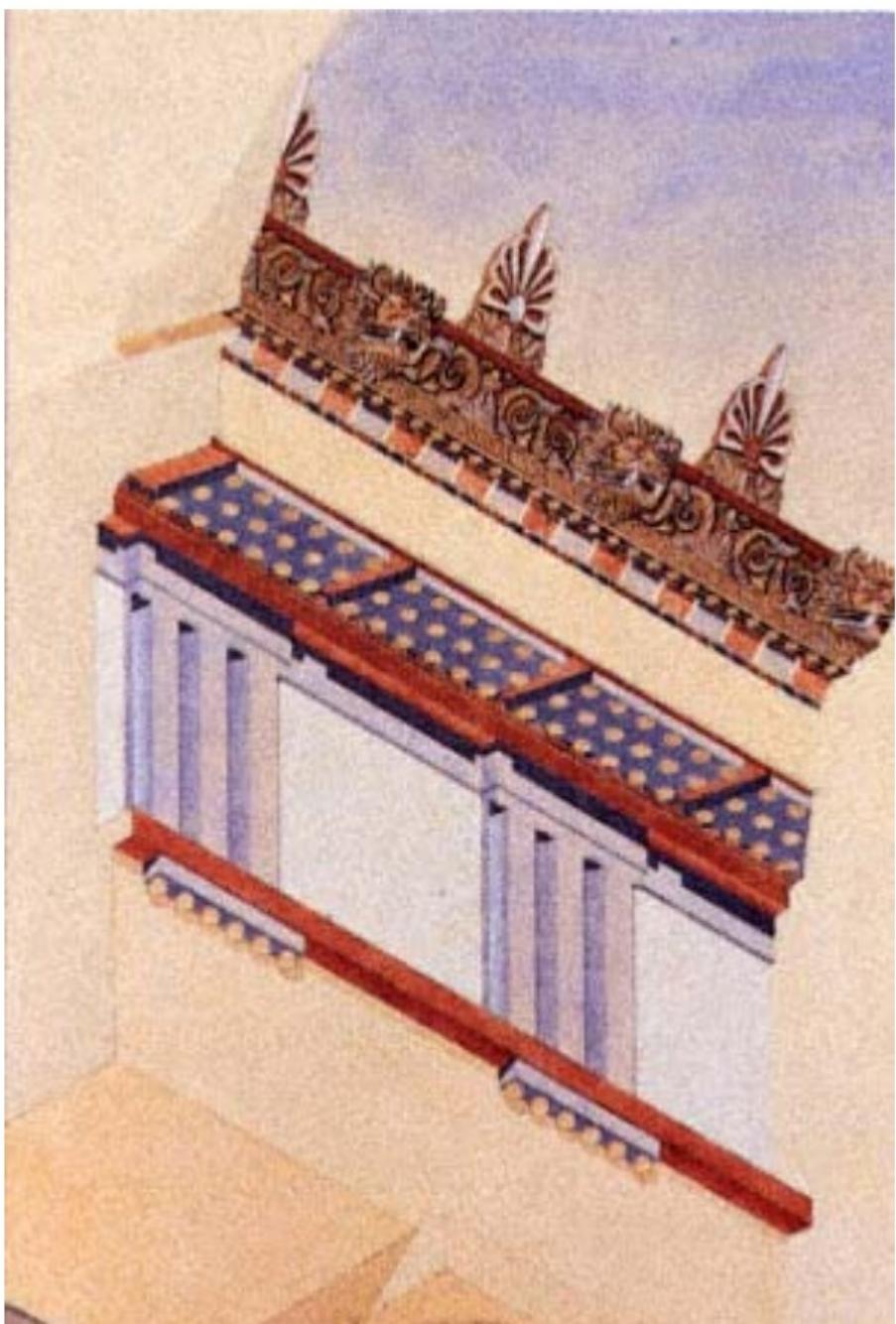


Plate 6  
Athens, Agora. Middle Stoa. Reconstruction of colors  
on entablature.



Plate 7  
Corinth, Temple of Apollo. Hellenistic terracotta sima







Plate 8

Houston, Texas, Children's Museum, by Robert Venturi. Kary

## Index of Places

### A

Abu Simbel (Egypt):

Ramesses II temple, 4

Aigina (island off coast of Attika):

Temple of Aphaia, 9091, 105, 1067, 108,  
112, 182n45, 210n13, figs. 2223, 27, pl. 2;

Temple of Apollo (Apollonion), 33n47, 158

Ak-alan (Phrygia, Anatolia), 152

Akragas (Sicily):

Temple of Zeus Olympios, 30n32, 45, 14849,  
163, 170n13, 182n46, ill. 8

Alabanda (Karia, Anatolia), 161

Alexandria (Egypt), 221

Amaseia Pontica (Pontus, Anatolia), 14

Amyklai (Lakonia, Peloponnesos), 169n11;

Throne, 65n27, 99n24, 147, 172n17, 213n24

Amyzon (Karia, Anatolia), 152

Aphidna (Attika, mainland Greece), 31n37

Aphrodisias (Karia, Anatolia):

Temple of Aphrodite, 218n43;

Zoilos frieze, 141n57

Apollonia (modern Pojan in Albania; Epiros, northwestern Greece):

frieze with Amazonomachy, 157;

stele of Parmeniskos, 95n8, 179n38;

Telamones, 64n24

Argive Heraion (Argolid, Peloponnesos), 18, 58, 90, 97n16, 101n38, 159, 16364, 179n34, 190, 203, ill. 17

Assos (Troad, Anatolia):

Temple of Athena, 53, 61n2, 8788, 98n20, 99n25, 15152, 153, 196, 211 n18, ill. 11

Assyria (Mesopotamia), 45, 51, 63n14, 126

Athens (Attika, mainland Greece), 22, 41, 44, 55, 118, 119, 135n21, 153, 156, 158, 159, 160, 166, 185, 200, 201;

Agora, 133n16, 178n32, pl. 6;

Akropolis, 12, 15, 17, 45, 91, 98n19, 110, 130, 148, 149, 16263, 181n44, 200, 202, 204;

Amazon metope from Akropolis, 158;

Amazonomachy friezes, 161;

Asklepieion, 90, 206;

Athena Parthenos, 17, 92, 118, 158, 171n16, 179n34, 193, 194, 195, 196, 197, 198;

Choragic Monument of Lysikrates (*see* Lysikrates Monument under this entry);

Eleusinion (frieze in Little Metropolis Church), 71n57;

Erechtheion (Temple of Athena Polias), 19, 41, 44, 4950, 52, 53, 55, 63n14, 69n48, 1078, 114, 118, 120, 122, 124, 128, 133n16, 146, 192, 193,

Karyatids in, 29n27, 45, 65n25, 14546, 147, figs. 3, 6, 10, 13, ills. 56

Erotes frieze, 79;

Hekatomedon, 56, 110n11, 136n30, col.  
pl. 3, ill. 35;

Hephaisteion, 105, 118, 133n 6, 211n17,  
friezes at, 20, 85, 115, 118, 154, 174n23,  
184, 187, 198,  
metopes at, 115, 127, 159,  
pediments at, 115, 171n16, 179n35;

Horologion (Tower of the Winds), 14,  
140n48, 221;

Hydra

Athens

*(continued)*

Pediment, 111;

Ilissos Temple, 20, 29n27, 105, 128, 184;

Introduction Pediment, 7, 111;

Kallithea Monument (Peiraieus), 161;

Long Walls, 194;

Lysikrates Monument, 55, 121, 203 (col. pl. 5);

Odeion, 194;

Old Athena Temple (Peisistratid; Athena Polias), 133, 136n27, 164, 191, 199, 215n33;

Older Parthenon, 191, 193, 199200, ill. 39;

Olive Tree Pediment, 7, 111, 170n 14;  
Olympieion, 14, 209;  
Painted Pediment, 111;  
  
Parthenon, 3, 13, 14, 29n27, 33n44, 50,  
65n29, 66n32, 81, 82, 94n2, 105, 109, 130,  
159, 188, 192, 193201, 202, 206, 207,  
210n11,  
  
akroteria at, 82, 9192,  
  
frieze at, 17, 20, 69n45, 8182, 11718,  
126, 128, 129, 136n27, 184, 187, 19495,  
197, 201,  
  
metopes at, 17, 31n33, 92, 107, 114, 116,  
123, 142n66, 152, 154, 156, 158, 16364,  
171n16, 174n23, 175n26, 179n34, 195,  
197, 198,  
  
pediments at, 16, 17, 20, 21, 90, 115, 117,  
189, 195, col. pl. 1, ills. 2830;

Poros group (lion-bull) from Agora, 132n10;  
Propylaia, 66n34, 109, 128, 142n65, 167n6,  
194, 201, 2023, 210n11, 211n17;  
Red Triton Pediment, 111;  
Stoa of Attalos II, 16, 62n12, 125, 128, 202;  
Stoa of Eumenes II, 62n12, 202;  
Stoa of Zeus, 170n13;  
Stoa Poikile, 170n13, 178n33;  
Temple of Ares, 179n35;  
Temple of Athena Nike, 17, 52, 91, 108, 206,  
akroteria at, 28n24, 118,  
balustrade at, 29n27, 68n44, 91, 102n39,  
friezes at, 20, 69n45, 128, 184, 198,

pediments at, 159, 179n34, 198;

theater, 45;

Tower of the Winds (*see* Horologion under this entry)

## B

Bassai (Arkadia, Peloponnesos), 153;

Temple of Apollo, Archaic, 191;

Temple of Apollo, Classical, 47, 81, 8485, 97n16, 13132n9, 155, 159, 171n16, 174n23, 211n17, ill. 9

Belevi (near Ephesos, Ionia, Asia Minor):

Mausoleum, 25n4, 56, 73n68, 7677, 123, 155, ills. 13, 21, 36

Berkeley, California:

Doe Memorial Library, 65n29;

University of California campus, vii, 65n29

Bryn Mawr, Pennsylvania: Erdman Hall, 1, 24n2

Burbank, California: Disney Company Corporate Headquarters, 46

## C

Carthage (Tunisia): Temple of Juno, 30n33

Chapel Hill, North Carolina: University of North Carolina, Playmakers Theater, 46

Chios (Ionic island off coast of Asia Minor), 70n51; temple model, 51

Chryse (Troad, Anatolia): Temple of Apollo Smintheus, 43

Corfu (Korkyra, Kerkyra; island off western coast of Greece), 57;

Artemision, 86, 135n21, 163, ill. 38;

terracotta pediments from Kanoni, 177n31

Corinth (Corinthia, Peloponnesos), 15, 47, 157;

Captives' Façade, 65n26;

Temple of Apollo, 133, 191, col. pl. 7

Crete (Aegean island), 22, 54

Cyprus (Aegean island):

capital with akanthos figure, 168n10.

*See also* Nikosia

D

Deir el-Bahri (Egypt):

Hatshepsut Complex, Hathor columns, 4

Delos (Kykladic island), 191;

Frieze with Deeds of Theseus (from Building 42), 86;

Monument of the Bulls, 65n27, 68n44;

Stoa of Antigonos Gonatas, 54, fig. 15;

Temple of the Athenians, 89, 93, figs. 1719, ill. 33

Delphi (Phokis, mainland Greece), 8, 22, 45, 147, 149, 2045;

Akanthos Column, 147;

Lesche of the Knidians, 182n45;

Sacred Way, 96n12;

Stoa of the Athenians, 41, 202;

Stoa of Attalos, 205;

Temple of Apollo, Alkmeonid (Archaic), 9, 28n24, 11112, 148, 164, 190, 204, 205;

Temple of Apollo, fourth-century, 17, 18, 19,  
133n15, 18889, 203, 204, 211n17;

Temple of Athena Pronaia:

Archaic, 64n21;

fourth-century, 33n44;

Tholos (at Sanctuary of Athena Pronaia),  
33n44, 48, 51, 85, 155, 15960, 171n16, 203,

as Wind Sanctuary, 99n26;

Treasury of the Athenians, 205, 211n17,

akroteria at, 5960, 8889, 157, 160,

metopes at, 88, 101n33, 112, 153, 154,  
157, 58, 171n16, 196,

pediments at, 88, 164, 171n16, 179n34;

Treasury of the Sikyonians, 27n20, 86,  
96n13, 127, 205;

as housing "Kleobis and Biton," 218n45,  
ill. 31;

Treasury of the Siphnians, 53, 145, 205,  
218n44,

friezes at, 20, 21, 54, 7980, 85, 11213,  
124, 129, 130n4, 136n30, 149, 164,  
19596, 198,

Karyatids at, 147,

pediments at, 111,

sima, 58, ills. 16, 2425

Didyma (Ionia, Asia Minor), 4;

Temple of Apollo, Archaic, 42, 53, 61n2,  
70n52, 72n64, 169n12, 202;

Temple of

Apollo, later, 43, 49, 50, 52, 55, 192, figs. 45, 89, ill. 10

E

Egypt (general), 34, 38, 44, 57, 26, 135n21

Eleusis (Attika, mainland Greece):

Chimaera capitals, 67n36;

dark stone from, 118, 128, 138n40, 146;

Lesser Propylon (Appius Claudius Pulcher), 54;

Telesterion, 14, 57, 194, 211n17

Elis (Elis, Peloponnesos):

Temple of Athena, 109

- Ephesos (Ionia, Asia Minor), 14, 157, 167n9, 177n31;
- Artemision, Archaic, 16, 26n9, 42, 57, 76, 93, 113, 119, 169n12, 171n16, 172n18, 177n31, 179n34, 187, 19192, 202, ill. 4;
- Artemision, later, 40, 43, 44, 171n16, 19192;
- Monument of C. Memmius, 45
- Epidauros (Epidauria, Peloponnesos), 120, 191;
- Propylon, 66n34, 79;
- Temple of Apollo Maleatas, 210n11 ;
- Temple of Artemis, 57;
- Temple of Asklepios, 19, 55, 66n33, 90, 18, 120, 132n12, 15960, 188, 189, 193, 206,
- akroteria at, 60, 8990, 93, 121, ill. 19ab;
- Tholos, 48, 56, 79, 99n26, 121, ill. 23

Eretria (on Euboia, island along eastern coast of Greece):

Temple of Apollo, 157

Etruria (general), 2, 7, 67n35, 72n64, 130n2., 131n8, 206

Euboia (island east of mainland Greece), 57

F

Foce del Sele (Campania, Italy):

Temple of Hera, 112, 157;

"Treasury," 8, 8687, 129,

date of, 100n31, 152, 153, 171n16, 172n17, 196, 202, 216n39, ill. 32

Fregellae (Lazio, Central Italy):

terracotta Telamones, 64n24

# G

Gela (Sicily), 59

Gjölbaschi-Trysa: *see* Trysa

Gothenburg (Sweden):

Arts Museum, 2

# H

Halikarnassos (Karia, Anatolia):

Mausolleion, x, 16, 25n4, 37, 53, 77, 161, 193, 202;

coffers at, 77, 120;

dark stone of, 120, 128;

friezes at, 20, 51, 69n45, 154, 155, 156, 160, 165, 171n16, 217n41, ill. 22

Herakleia Minoa (Sicily), 67n35

Herculaneum (Campania, Italy), 105

Himera (Sicily):

Athenaion (Temple of Victory), 9293,  
133n14, 182n46, figs. 2426;

Temple B, 173n18

Houston, Texas:

Children's Museum, 222, col. pl. 8

I

Iasos (Karia, Asia Minor), 68n44

Ilion: *see* Troy

Isthmia (Corinthia, Peloponnesos), 169n11;

Temple of Poseidon, 30n31, 51, 133n16

# K

Kalapodi (Phokis, mainland Greece), 181n44

Kalydon (Aitolia, northwestern Greece), 34n54

Karnak (Egypt):

Temple of Amun, Hypostyle Hall, 3

Karthaia (on island of Keos, off tip of Attica):

Athenaion, 157, 222n1

Kos (island off coast of Asia Minor), 13

Kyklades (islands between Greece and Turkey),  
54, 80, 220

Kyrene (Libya):

arch of Septimius Severus, 141n53

Kyzikos (Propontis, Anatolia):

carved column drum, 42;

Temple of Queen Apollonis, 13, 63n19

## L

Labraunda (or Labranda; Karia, Anatolia), 61n2,  
160

Lagina (Karia, Anatolia):

Temple of Hekate, 141n57, 161, 179n34

Larisa on Hermos (Phokaia, Asia Minor), 57,  
152

Lebadeia (Boiotia, mainland Greece):

Temple of Zeus Basileus, 206

Lefkadia (Macedonia, northern Greece);

Great Tomb, 7778, 95n8, 11517, 127,  
138n36, 175n27, 202, col. pl. 4;

Palmette Tomb, 138n36

Lefkandi (on Euboia, island along eastern coast of Greece), 171n16

Limyra (Lykia, Anatolia), 155, 191;

Heroon of Perikle, 28n24, 51, 65n25, 89, 139n44, 167n5, 202, figs. 2021, ill. 34;

Ptolemaion, 140n51, 155 (figs. 2930)

Lokroi (Italy):

Ionic Temple, 44;

painted terracotta plaques from a temple, 51

Luxor (Egypt):

Courtyard of Ramesses II, 4

Lykosoura (Arkadia, Peloponnesos), 33n47

Magna Graecia (both southern Italy and Sicily):  
22, 27n22, 29n29, 41, 44, 49, 50, 54, 55, 57, 58,  
59, 72n62, 72n63, 80, 92, 108, 109, 112, 135n21,  
149, 150, 151, 170n1314, 182n44, 190, 205

Magnesia (on Maeander River; Ionia, Asia Minor):

Agora, 6364n19;

Temple of Artemis, 57, 69n45, 7879, 16162,  
ill. 15;

Theater, 67n37

Magnesia (on Mt. Sipylos; modern Manisa; Lydia, Anatolia), 16, 96n10, 181n43

Mahdia (wreck; off coast of Tunisia near Tunis),  
49, 68n44

Mantineia (Arkadia, Peloponnesos):

Battle of, 170n13

Marathon (Attika, mainland Greece):

Battle of, 31n37, 91, 157, 159, 195, 204

Mazi (ancient Makistos, Triphylia, Peloponnesos):

Temple of Athena, 15960, 179n34, 181n44,  
190

Megalopolis (Arkadia, Peloponnesos), 33n47

Megara (Megarid, mainland Greece):

Battle of, 91

Mesopotamia (general), 34, 63n14

Messa (on island of Lesbos, off coast of Asia Minor):

Temple of Aphrodite, 12122, 128

Messene (Messenia, Peloponnesos):

Asklepieion, 49;

Temple of Aphrodite (?), 58

Metapontion (southern Italy):

Ionic Temple, 44, 54, 55, ill 7

Miletos (Ionia, Asia Minor), 181n42;

Bouleuterion, 65n27, 70n53;

Didymaion (Temple of Apollo): *see* Didyma

Morgantina (Sicily), 59, fig. 16

Mylasa (Karia, Anatolia), 155, 161

Myra (Lykia, Anatolia), 120

Mytilene (on island of Lesbos, off coast of Asia Minor), 152

Myus (Ionia, Asia Minor), 68n44

N

Nashville, Tennessee:

Athena Parthenos by A. LeQuire, 118,  
178n33

Naukratis (Egypt):

Temple of Apollo, 44

Naxos (Sicily), 59

Neandria (Troad, Anatolia), 152

Nemea (Argolid, Peloponnesos):

Mycenaean Palace, 29n31;

Temple of Zeus, 211n15

Nikosia (Cyprus): Amazon frieze, 161

O

Olympia (Elis, Peloponnesos), 15, 16, 22, 51,  
108, 153, 174n22, 206;

Echo stoa, 16;

Megarian Treasury, 111, 181n44;

Metroon (terracotta metope from?), 71n 56, 210;

Philippeion, 202;

Sikyonian Treasury, 206;

Temple of Hera, 59, 218n43, ill. 18;

Temple of Zeus, 3, 18, 97n16, 171n6, 196,  
cult image of, 109, 118, 195, 196, 19899,  
metopes at, 18, 45, 8081, 11415, 128,  
143, 149, 159, 170n13, 173n21, 192,  
pediments at, 17, 19, 20, 80, 94n3, 114,  
154, fig. 7, ills. 20, 26ab;

terracotta antefix (? satyr attacking Nymph),  
72n66

P

Paestum (Poseidonia, Italy):

Basilica (Temple of Hera), 65n27, 133n14, 216n39;

Temple of Athena, 71n61, ill. 14

Paros (Kykladic island), 68n44, 210n12

Patras (Achaia, Peloponnesos), 159

Pergamon (Mysia, Anatolia), 46, 163;

"Altar," 50, 73n68, 203;

Gigantomachy of, 37, 124, 162, 183n49, 203,

Telephos frieze of, 27n 16, 51, 124, 129, 139n45, 203, figs. 1112, 28;

Erotes frieze, 79;

Library, 21, 203;

Royal Andron (Building V), 68nn4445;

Temenos of Athena Nikephoros (propylon and stoas), 68n44, 70n55, 141n58, 169n13, 181n44;

Temple of Demeter, 140n49;

Temple of Hermes (or Dionysos?), 72n63

Persepolis (Persia), 5, 126, 142n61, 145, 170n14

Philadelphia, Pennsylvania: Art Museum, 104

Phoenix-Thessaloniki Tomb, 138n36

Plataia (Boiotia, mainland Greece):

Battle (and oath)of, 91, 134n21, 145, 159, 178n34;

Temple of Athena Areia, 133n16

Pojan: *see* Apollonia, Albania

Pompeii (Campania, Italy), 105, 129n

Priene (Ionia, Asia Minor):

Temple of Athena, 56, 95n6, 121, 161,  
179n34, 192, 193

Prinias (on island of Crete), 51

Pyrra (on island of Lesbos), 63n15

## R

Ramesseum (Egypt, at Egyptian Thebes), 4

Rhamnous (Attika, mainland Greece), 15,  
211n17

Rhodes (island near coast of Turkey), 168n10

Rome (Italy):

Arch of Titus (composite capital), 47;

Basilica Aemilia: 26n6;  
Baths of Caracalla, 49;  
Colosseum (Flavian Amphitheater), 2;  
Column of Trajan, 32n42., 75;  
Corinthian Portico, 123;  
Forum Augusti, 147, 149;  
Forum Traiani, 32n42, 75;  
Pantheon of Agrippa, 2;  
Porticus of Octavia (tem-

pies of Jupiter and Juno), 3n39;

Temple of Apollo Sosianus, 16, 177n32;

Tomb of the Haterii, 25n4

## S

Sagalassos (Pisidia, Anatolia):

Bouleuterion, 64n19, 70n53;

Frieze of Dancing Women, 79

Samos (island near coast of Turkey):

Erotes frieze, 79;

Temple of Hera, early Archaic, 64n21;

Temple of Hera, "of Polykrates," 44, 64n21

Samothrake (island between northern Greece and Turkey):

Hieron, 134n16, 56;

Propylon of Ptolemy II, 48, 49, 50, 79;

Propylon to the "Temenos" (Hall of Choral Dancers), 44, 54, 55, 79

Sardis (Lydia, Anatolia), 157;

Temple model (shrine), 51, 172n18

Selinous (Sicily), 8, 10, 105;

Amazonomachy frieze, 157;

Corinthian (fourth-century) capital, 67n35;

Malophoros Sanctuary, 216n40;

Temple B ("of Empedokles"), 106;

Temple C, 8, 106, 112, 196;

Temple E, 81, 84, 159, 179n34, 183n46, 196, 213n24, 207, ill. 27;

Temple F, 84, 165;

Temple G, 181n44

Sicily (Italian island). *See* Magna Graecia

Sidon (Syria):

Alexander Sarcophagus, 3638, 49, 58, 60, 61n2, 61n4, 104, 122, 123, 128, figs. 12;

Lykian Sarcophagus, 119, 155;

Mourning Women Sarcophagus, 11920;

Satrap Sarcophagus, 119

Sinope (on Black Sea):

funerary stele from, 55

Slavochori. *See* Sparta

- Smyrna (Old; Ionia, Asia Minor), 63n15
- Sounion (Attika, mainland Greece), 216n40;
- Temple of Poseidon, 155, 171n16, 191
- Sparta (Lakonia, Peloponnesos), 14546, 161, 178n34;
- Amazonomachy Metopes, 161;
- Amyklaion (*see Amyklai*);
- model from river Eurotas, 72n62;
- Persian stoa, 145, 14849;
- sofa capital from Slavochori, 67n37
- Svestari (Thrake), 168n10
- Syracuse (Sicily): Artemision, 42;
- Gorgon plaque, 112;

Theater, 169n13

T

Tanagra (Boiotia, mainland Greece), 175n24;

Temple of Demeter and Kore, 204

Taras (Tarentum, Italy), 49, 124, 155, 161

Tegea (Arkadia, Peloponnesos):

sofa capital, 67n37;

Temple of Athena Alea, 19, 52, 193,  
metopes at, 33n47, 97n16, 102n38, 120,  
pediments at, 18, 1920

Teos (Ionia, Asia Minor), 161;

Temple of Dionysos, 29n27, 156

Termessos (Lykia, Anatolia), 181n44

Thasos (island off coast of Turkey), 5859,  
72n64, 152, 176n28

Thebes (Boiotia, mainland Greece):

Temple of Herakles, 18, 33n47

Thera (Kykladic island), 155, 222nl

Thermon (Aitolia, northwestern Greece), 30n31,  
58, 172n17;

Temple of Apollo, 34n54, 57

Titane (unexcavated; Corinthia, Peloponnesos);

Temple of Asklepios, 33n47

Topolia (Boiotia, mainland Greece), 157

Troy (or Ilion; Troad, Anatolia), 59;

Athenaion, 15556, 163, 171n16, 217n43

Trysa (Lykia, Anatolia):

Heroon, 69n45, 100n28, 160, 171n16, ill. 37

V

Vergina, (Ancient Aigai? Macedonia, northern Greece);

Palace, 137n35;

"Tomb of Philip," 62n5

Vienna: Academy for the Visual Art, 2

W

Washington, D.C., 104

X

Xanthos (Lykia, Anatolia):

Nereid Monument, 53, 61n2, 69n45, 120, 191, 202, fig. 14, ill. 12

Y

Yubileynoe (Taman Peninsula, on Black Sea),  
180n40

Thank you for evaluating ePub to PDF Converter.

That is a trial version. Get full version in [http://www.epub-to-pdf.com/?pdf\\_out](http://www.epub-to-pdf.com/?pdf_out)